



THE UNIVERSITY *of* EDINBURGH

This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

- This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.
- A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.
- This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.
- The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.
- When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.

Developing Professional Judgment and Decision Making Expertise
in Applied Sport Psychology

Amanda Martindale

PhD

The University of Edinburgh

2010

Author Declaration

I hereby declare that:

- a) I have composed this thesis,
- b) This is my own work,
- c) This work has not been submitted for any other degree or academic award; however, descriptive elements and reflections on my own professional practice have formed required parts of successful applications for Chartered status with the British Psychological Society (Division of Sport and Exercise Psychology) and accreditation with the British Association of Sport and Exercise Sciences.

Amanda Martindale

August 2010

Acknowledgements

My supervisor, Prof. Dave Collins, for his unfailing support and for the enlightening discussion around this topic and many others. For allowing me to investigate his practice and for exposing his philosophies, strengths and weaknesses. I feel very fortunate to have been granted access to the eloquent cognition of such a brilliant psychologist. I hope I have done his work justice in recounting it within this thesis.

Dr. Sheelagh Rodgers for comments on drafts of early chapters within this thesis and for offering a clinical perspective on the topic.

The high performance athletes who gave up their time to recount their stories of receiving sport psychology support and especially “Corrin” for being my case study. The MSc students who were willing for data on their development to be reported here and the independent assessors for their time in evaluating student responses.

My colleagues in the Institute of Sport, PE and Health Sciences who have shown interest in my progress and, in particular, Hugh Richards and Alan MacPherson, for their understanding of undertaking this thesis amid my other work commitments.

My family, especially my husband Russ, for his unconditional love, support and encouragement; we may have done it the hard way, but we got there in the end... And finally, my wee boy Oliver, for unknowingly providing the final bit of inspiration needed to complete this thesis.

Table of Contents

Author Declaration	i
Acknowledgements	ii
Table of Contents	iii – vi
Abstract	vii
Chapter 1 - Introduction	1 - 10
1.1 Why Professional Judgment and Decision Making?	1
1.2 The Need for ‘Why’ as well as ‘What’	3
1.3 Delimitations, Context and Scope of the Thesis	6
1.4 Aim and Objectives of the Thesis	8
1.5 An Overview of the Thesis	9
Chapter 2 - Critical Review of Literature	11 - 43
2.1 Introduction	11
2.2 What is Applied Sport Psychology?	12
2.3 How Applied Sport Psychology Works in Practice	14
2.4 Evaluation of Applied Sport Psychology	18
2.5 What’s Missing?	33
2.6 Research Direction and Methodological Issues	40
2.7 Further Research: What Can We Learn?	42

Chapter 3 – A Focus on PJDM **44 - 63**

3.1 Introducing PJDM Practice and Research	44
3.2 The Nature of Decision Content in Applied Sport Psychology	47
3.3 The Role of “Intention for Impact” in Applied Sport Psychology	53
3.4 Future Directions in PJDM Research	61

Chapter 4 - Research Methodology: Issues Surrounding the Approaches Used

64 - 81

4.1 Introduction	64
4.2 ‘Constructing’ the Landscape of Qualitative Research	68
4.3 Research Design and Strategies of Inquiry	71
4.4 Data Analysis, Interpretation, and Presentation	76
4.5 Ethical Considerations and Principles of Good Practice	79
4.6 Research Methodology: A Summary	80

Chapter 5 - Practitioner Reflections on Long-Term Support Programmes

82 - 125

5.1 Introduction	82
5.2 Methodology	86
5.3 Results and Discussion	91
5.4 General Discussion	120

Chapter 6 - Athlete Reflections on Long-Term Support Programmes	126 - 167
6.1 Introduction	126
6.2 Methodology	131
6.3 Results and Discussion	135
6.4 General Discussion	160
 Chapter 7 - The Story So Far: What Learned and Where Next?	 168 - 195
7.1 Introduction	168
7.2 Resume of Chapters So Far	168
7.3 Further Theoretical Underpinning	175
7.4 Summary – So Where Are We?	193
7.5 Where Next?	194
 Chapter 8 - Reflection-in-Action Research: A Case Study	 196 - 229
8.1 Introduction	196
8.2 Case Study: PJDM in Action	199
8.3 Discussion	218
 Chapter 9 - Training PJDM Expertise in Novice Practitioners	 230 - 246
9.1 Introduction	230
9.2 Method	235
9.3 Results	240
9.4 Discussion	242

Chapter 10 - General Discussion	247 - 266
10.1 Overall Conclusions, Implications and Recommendations	247
10.2 Future Research Directions	257
10.3 Final Conclusions	262
10.4 A Personal Review of PhD Process	265
 References	 267 - 287

Appendices

Appendix A – Martindale & Collins (2005)
Appendix B – Martindale & Collins (2007)
Appendix C – Martindale & Collins (2010)
Appendix D – Conference Abstracts
Appendix E – Practitioner Interview Schedule
Appendix F – Athlete Interview Schedule
Appendix G – Case Vignettes
Appendix H – Instructional Material
Appendix I – Measures of Case Formulation Quality Criteria

Abstract

Establishing and enhancing standards of practice is important in any profession, and particularly so in a new and emerging domain such as sport psychology. Accordingly, this thesis draws on literature from teaching, medicine, and parallel disciplines such as clinical and counselling psychology to propose a Professional Judgment and Decision Making (PJDM) approach to the evaluation, reflective practice, and training of applied sport psychologists. Methods and mechanisms already utilised in these more established professions are considered alongside empirical data, generated from long-term programmes of sport psychology consultancy, as potential means to further enhance the performance of professionals in this developing field. As such, the thesis highlights gaps in current process, proposes an original conceptualisation of practice, and illustrates the possible outcomes and implications of this PJDM approach. In addition, the emergent PJDM principles are illustrated in practice through a reflection-in-action case study, and trained and evaluated in novice applied sport psychology practitioners as a basis for the effective development of PJDM expertise.

Chapter 1. Introduction

1.1 Why Professional Judgment and Decision Making?

Sport psychology has grown from an interesting oddity, characterised by ‘gurus’ and moonlighting clinicians, to an established discipline in its own right and an accepted feature of the support landscape in high performance sport. With maturity comes added responsibility, however, and this acceptance carries (at least tacit) necessity for self policing and an upward spiral of professionalism. Now that applied sport psychology has developed a legitimate status within the support arena it is time to move on from asking *whether* sport psychologists have an impact on an athlete or coach to asking *how*, or even *how better*, they can create this impact on behaviour and/or cognition. Furthermore, it has previously been reported that assessment of needs in applied sport psychology support often leads directly on to the intervention and that the mediating phase of issue conceptualisation (the essential bridge from one to the other) may have been neglected (Poczwardowski, Sherman & Henschen, 1998). It is the recognition of this phase as the ‘missing link’ for determining the quality, and ultimately the success, of an intervention which has stimulated this research into Professional Judgment and Decision Making (PJDM).

This research direction is very much linked to the question of how to evaluate applied sport psychology support to athletes and coaches. Unlike physiological and biomechanical support, improvements cannot be so readily quantified through objective measurement. Accordingly, psychological support has often been assessed through short term performance success. This is unfortunate given that the very essence of applied sport psychology often involves establishing rapport and trust

between athlete and practitioner before effective intervention can take place; inevitably a longer duration, slower burning initiative. Additionally, the intervention itself is likely to involve the long term development of the athletes' covert experiences which, by their nature, are more difficult to evaluate and attribute to performance success than overt behaviours.

Adding to these potential shortcomings, research into the evaluation of sport psychology support techniques has tended to mirror the climate generated through the applied setting. Given that practitioners have invested a large amount of time educating athletes, coaches and other support personnel about the basis and value of sport psychology, it is perhaps not surprising that related research has initially adopted a defensive position, opting to 'prove' that interventions work rather than attempting to discover how they work and what mechanisms lead to change (cf. Greenberg, 1991).

Reflecting progress made in psychotherapy and counselling psychology (see Chapter 3 for more detail of this) my intention is not to explore the complex "black box" of practitioner/client interactions, but rather to identify what the practitioner needs to go into the intervention with in order to be effective. By exploring what the sport psychologist is trying to do in support sessions and wider programmes, and how they go about making their decisions, novice and developing practitioners could be provided with invaluable information to support their development and ultimately the development of the profession.

1.2 The Need for ‘Why’ as well as ‘What’

I feel that this represents an essential component of the way forwards for our profession. To demonstrate; in a somewhat typical example of an applied practice journal article, Fifer, Henschen, Gould, and Ravizza (2008) offered an interesting array of information and insights utilised by three highly experienced applied sport psychology consultants in their paper entitled “What works when working with athletes”. In this regard, it offered a valuable contribution to the professional practice literature. The authors state that “a highly effective method for disseminating knowledge is to observe the most experienced individuals” (p. 356) and certainly at a fundamental level this is true. It is my contention, however, that it may be possible to glean a further, but crucial, level of understanding by exploring the metacognition behind the selection of such courses of action. In other words, by exploring “*why* does what works work?” (Martindale & Collins, 2010) we may be able to gain insight into how practitioners arrived at their stances, came to their decisions, weighed and discarded alternatives, and reached their eventual suggested directions. Without this information, it is difficult for developing practitioners to accurately evaluate the applicability of the advice proffered; for example “can *I* do this?” and “would *I* do this?” Such questions are dependent on a deeper understanding of the rationale and philosophy behind the action (Poczwardowski, Sherman & Ravizza, 2004).

Interestingly, my contention that “why practice is undertaken” is as crucial as “what practice is undertaken” is supported by many of the sources cited by Fifer et al., (2008) in their own paper. In presenting a model for teacher development, for

example, Yopp and Guillame (1999) state the importance of students understanding the reasoning of the experienced teacher's decision making:

“After the lesson, the demonstration teacher discusses with the credential students the lesson both in terms of the reasons for conducting that particular lesson with the children and in terms of the “on the spot” decisions that were made during the actual lesson” (p. 8).

In similar fashion, when espousing their model of “cognitive apprenticeship”, Collins, Brown, and Holum (1991) observe:

“Too little attention is paid to the reasoning and strategies that experts employ when they acquire knowledge or put it to work to solve complex or real-life tasks... In cognitive apprenticeship, one needs to deliberately bring the thinking to the surface, to make it visible... The teacher's thinking must be made visible to the students and the student's thinking must be made visible to the teacher” (p. 1-3).

At the risk of this level of metacognition appearing trivial or, worse still, considered to be naval gazing, it is also worth noting that an increasing body of literature related to the importance of PJDM is apparent in parallel fields and professions such as counselling psychology (e.g., Hill, 1992), teaching (e.g., Curtner-Smith, 1999), medicine (e.g., Patel & Ramoni, 1997), coaching (e.g., Abraham, Collins & Martindale, 2004), and refereeing (e.g., Mascarenhas, Collins, Mortimer & Morris, 2005).

Reflecting earlier comments, there are numerous ‘missed opportunities’ to explore the PJDM of the highly experienced practitioners referred to in the Fifer et al., article. For example, in the ‘delivery of information’ section (p. 366 – 368), where the area of program delivery is discussed in relation to ‘how’, ‘when’, and ‘where’, but not ‘why’ these strategies were adopted. As such, much of the prose

offers a description of ‘what’ the practitioners have found to work rather than ‘why’ this was the case. Yet, such detail is an essential step to facilitate the transfer of knowledge from *their* paper to *our* practice. To unpack one example, consider the use of peer coaching suggested on p. 369 as a strategy where athletes coach one another on their mental games. This may be an effective strategy for use in the examples provided (injury rehabilitation and veteran interviews), however, the explanation as to ‘why’ this is an appropriate strategy in these contexts (and not others) is lacking. As such, it does not promote a level of insight whereby the novice practitioner might understand that peer coaching is relevant in these contexts, but unlikely to be effective in highly competitive squad situations, for example, where ‘peers’ may be competing for places in the same team. In summary, Fifer et al.’s paper can be seen as characterising a weakness in the professional development literature.

Furthermore, the potential benefits of exploring “*why* what works works” are apparent for all levels of practitioner, not just for novice practitioners who are developing an understanding of intervention selection. For example, established practitioners wishing to engage in meaningful reflection and highly experienced practitioners, who are perhaps monitoring the standards of the profession through evaluation of their own and other’s practice, would also stand to benefit from developing models of the ‘problem space’ that practitioners face. This insight will, in turn, likely be of benefit to clients as practitioners develop a broader conceptualisation of their practice, competence, interpersonal and relational issues, and presentation to the public (Hays, 2006).

As such, this thesis employs techniques to access the judgments and decisions, attentional demands, critical cues and patterns, and problem-solving strategies of a highly experienced applied sport psychology consultant along with a number of his clients (cf. Gore & McAndrew, 2009). Of particular interest is how these cognitive processes are believed to impact on the overall support process. This type of research has the capability to access practitioners' 'declarative' knowledge in addition to the type of 'procedural' information provided by Fifer et al., and such research is supported by other calls to follow sport psychology consultants longitudinally to record experienced practitioners' histories (e.g., Tod, 2007). It is hoped that this depth of analysis will provide a further layer of insight into the cognitive components that govern the generation, selection, and implementation of applied sport psychology practises and, therefore, assist in providing more systematic and conceptually rigorous training methods.

1.3 Delimitations, Context and Scope of the Thesis

Prior to undertaking research into applied sport psychology practice, it is necessary to explore the context in which the exploration of this practice is taking place. In addition, for the purpose of this thesis, it is necessary to highlight the associated delimitations in terms of scope. There are two main delimitations to unpack; the first is that much of the content of this thesis, and therefore the existing pathways that have been explored (in relation to training and accreditation for example) pertain to the UK system. Accordingly, whilst the implications reach far beyond the UK, many of the examples given refer to UK based institutions and professional bodies, most notably The British Psychological Society (BPS) and The

British Association of Sport and Exercise Sciences (BASES) which reflects this conscious decision.

The second key delimitation is that the intervention approach used throughout this thesis is focussed on ‘performance enhancement’, rather than on ‘performers with problems’. In making this distinction it is useful to consider the differences between applying sport psychology from a clinical perspective (where the intervention may be problem-focussed) and applying sport psychology from a performance perspective (where the intervention is performance-focussed). Until it was brought to light (through reviewers’ comments on a paper from this thesis submitted for publication), I was not aware of the existence of any debate surrounding the over-riding goal for applied sport psychology practitioners. I had supposed that performance enhancement would be the primary goal to which all parties involved in the provision of support to elite athletes would be working.

There are good pragmatic grounds for this position. Certainly, governing bodies and sports institutes employing the services of sport psychologists would consider performance enhancement as their primary, indeed for most, their only objective. However, these reviewers’ comments which strongly disputed this assertion forced the acknowledgement, albeit with discomobulation, that not all applied sport psychologists see themselves as working for the purposes of performance enhancement, at least not necessarily all of the time.

As a coherent argument, considering that some professionals are also clinically trained and that most will have some counselling skills and knowledge are indicators that they may be called on to help alleviate distress in areas out with the sporting arena (for example see Anderson, 2000). Although, it could be argued that

the primary purpose of alleviating distress is to allow full focus on the client's sport (in other words, a performance focus 'once removed'), it is recognised that for some practitioners, the primary purpose may be to enhance overall well being and not performance per se (e.g., Anderson, 2009).

Never-the-less it is argued here that a performance focus is predominantly sought after by athletes, coaches and governing bodies. Since this thesis began, the literature has developed in terms of defining this approach and the ethical context of working in the field of 'performance psychology' (e.g., Hays, 2006) although the debate surrounding the ultimate 'goal' of sport psychology is still going strong (e.g., Anderson, 2009).

1.4 Aim and Objectives of the Thesis

Reflecting this contextual backdrop and associated concerns the thesis was focused on the following overall aim and objectives:

Aim

To investigate the nature of PJDM processes through practitioner and athlete reflections and then to build on existing evaluation, reflective practice and training procedures in order to develop PJDM expertise in applied sport psychology.

Objectives

1. To examine the PJDM practice and research in other related fields, in particular, counselling and clinical psychology and to highlight the potential benefit for applied sport psychology.

2. To identify the nature of decision making processes undertaken by an applied sport psychologist in the provision of long term support to athletes and to evaluate the impact of these processes through athlete reflections.
3. To apply PJDM principles to a case study with an individual athlete and reflect on the process ‘in action’.
4. To use the principles and theory related to PJDM to establish guidelines for training PJDM expertise.

1.5 An Overview of the Thesis

The initial phase of this thesis (Chapters 2 – 4) could be described as the “parameterisation” of the research area. This involves a critical review of literature surrounding the ‘processes’ involved in applied sport psychology support provision to highlight the existing gaps in practice. Following the emergence through Chapter 2 of PJDM as a crucial and neglected area, Chapter 3 considers the importance of this topic in other parallel professions, whilst the methodology chapter highlights pertinent considerations in research of this nature.

The second phase of the thesis (Chapters 5 – 7) could be described as the “examination” of this research area. Empirical qualitative data were collected in Chapters 5 and 6 from a practitioner and four athletes on the nature of effective applied sport psychology support over a long-term period. The principles which emerged from these reflections are then considered alongside a further theoretical backdrop in Chapter 7 in order to provide deeper understanding and direction for the final studies.

The third phase of the thesis could be described as the “intervention” phase of this research. In Chapter 8, the principles which have emerged thus far and the associated theoretical underpinning are applied in a case study with an individual athlete, and then in Chapter 9, an attempt is made to ‘train’ novice practitioners to develop their PJDM expertise.

The final phase of the thesis involves the “discussion” of the overall conclusions, implications and recommendations, the future research directions, and a personal review of the PhD process. It is hoped that the structure adopted in this thesis has enabled a comprehensive coverage of this research area.

Chapter 2. Critical Review of Literature

2.1 Introduction

The aim of this review of literature was to report and critically reflect on current practice in the provision of applied sport psychology support to clients in performance settings. As such, the intention was to expose areas that appear to require further exploration and clarification in order to develop effective professional practice. Strean and Roberts (1992) highlighted some time ago that “we must begin to evaluate critically what we do rather than assume what we do is automatically well founded” (p.62). However, such critical evaluation of applied practice remains an area with vast potential for investigation. Only by undertaking a critical analysis of our service provision and practises can we ensure that our clients are receiving the best support possible and that our profession is evolving in the most efficient manner.

Accordingly, the critical review of literature began with an analysis of what applied sport psychology practice is and how (I think) it works in the field. It is necessary to define and explore these questions in order to adopt a clear understanding of what works well and what may be missing from current practice and procedures. As such, this review of literature was structured to be general to start with; focusing on more specific aspects of practice as it progressed. A critical eye was adopted throughout to highlight methodological and conceptual weaknesses in the literature and research; in particular, flaws in reasoning or direction were identified. In addition, certain methodological challenges and issues were addressed

before clarifying what could be learnt from further research in to the performance of applied sport psychologists and how the field may be advanced as a result.

2.2. What is Applied Sport Psychology?

The Association for Applied Sport Psychology (AASP) states that applied sport and exercise psychology, “involves extending theory and research into the field to educate coaches, athletes, parents, exercisers, fitness professionals, and athletic trainers about the psychological aspects of their sport or activity” (AASP, 2006). The association also states that “the practice of applied sport and exercise psychology usually involves a combination of individual and group consulting or counselling depending on the style of the professional conducting the intervention and the needs of the client” (AASP, 2006).

This introduction highlights the discretion that the professional is afforded in both the style and the objectives of their consultancy. Accordingly, some attempts have been made to capture the characteristics of applied sport psychology practice through exploring the role of the practitioner and the ways in which this may structure practice. For example, Hardy and Parfitt (1994) describe certain features of their consultancy approach as making themselves easily accessible and to be completely trusted by the performers and coaches, although the logic underpinning these procedural aims was notably tacit rather than empirically based. However, given the wide range of practitioners operating within applied sport psychology, there is still considerable progress to be made in identifying the full range of practitioner roles and characteristics of practice that may be displayed and utilised.

2.2.1 The Consultant's Role

Surprisingly little research has been conducted into the perceived role of the sport psychologist with athletes, coaches or with sport psychologists themselves. Most of the research in this area has been concerned with others perceptions of athletes who consult sport psychologists, although even here results are inconclusive. For example, the reported “negative halo effect” (Linder, Brewer, Van Raalte, and De Lange, 1991) found within a population of North American undergraduate students was not replicated within a collegiate sporting population in which the sport psychologist was regarded as an important resource (Van Raalte, Brewer, Brewer and Linder, 1992).

One study which has considered the role of the psychologist is Hardy and Parfitt's (1994) comparison of two coaches' and one sport psychologist's perspectives on the qualities and characteristics of the ideal sport psychologist. One coach matched almost exactly that of the sport psychologist while the other coach was dramatically different. This suggests that, perhaps unsurprisingly, the “ideal sport psychologist” is not a unitary concept. For example, in differing circumstances with differing needs, the role, methods, and associated characteristics required of the practitioner may be dramatically different (as can clearly be seen from examinations with other ‘types’ of psychologist e.g., BPS, 2010). As such, the potential for discrepancy in role perception and therefore, in expectation, is likely to have a considerable effect on the success of the support provision. Of course, the nature of Hardy and Parfitt's comparison limits the extent to which these findings can be generalised beyond the scenario described, although it does serve to demonstrate that differences in perceptions exist even at micro levels of support.

At a more fundamental level, recent literature (e.g., Cropley, Miles, Hanton, and Niven, 2007) states that a clear definition of effective practice in applied sport psychology has been elusive. This is despite efforts to determine ‘what we should be assessing’, which have ultimately failed to take us significantly further forward from the status quo (e.g., Anderson, Miles, Robinson & Mahoney, 2004). This lack of clarity in what is required to make an “effective” applied sport psychologist is not surprising given the vast and varied aspects of practice. Hardy and Parfitt (1994) report that services requested of a sport psychologist may include assistance in coping with pre-performance anxiety, strategies for coping with training stress and fatigue, teaching specific psychological skills, assistance in dealing with injury, handling interactions with family, and communication problems with coaches. Hardy and Jones (1994) include helping to develop team cohesion, trouble shooting in training, and advising in the management of clinical problems to this first menu. Even so, this remains a limited list and since then, the evolution in the perceived role of sport psychologists has been considerably lacking in comparison to parallel developing fields such as business or executive coaching (e.g., Coutu & Kauffman, 2009). Such diversity of practice and approach thus requires some recognised form or structure to ensure that practitioners are operating in a coherent and therefore appropriate manner.

2.3 How Applied Sport Psychology Works in Practice

2.3.1 *A Service Delivery Heuristic*

An attempt to provide this necessary structure was proposed by Poczwadowski et al., (1998) as a “service delivery heuristic”. This consisted of 11

factors that a consultant may consider when planning, implementing and evaluating psychological services: professional boundaries; professional philosophy; making contact; assessment; conceptualising athletes' concerns and potential interventions; range, types, and organisation of service; programme implementation; managing the self as an intervention instrument; programme and consultant evaluation; conclusions and implications; and leaving the setting. The authors claim that, although consultants each have their own unique style and approach, these factors are pre-requisite considerations for effective practice. While this is a useful addition to the literature, the range of practice/intervention models adopted by practitioners requires fuller exploration in order to capture the influence of these service delivery factors. As just one example, how do these different elements apply, co-act or vary according to the objectives of the programme?

2.3.2 Models of Intervention / Practice

Most practitioners will follow a model of intervention or practice in the delivery of their services and this is a fundamental way of providing structure and coherence. The range of models of intervention is ever-increasing and includes Cognitive-Behavioural (e.g., Perna, Neyer, Murphy, Ogilvie & Murphy, 1995), Life Development (e.g., Danish, Petitpas & Hale, 1992), and Solution-Focused (e.g., Hoigaard & Tore Johansen, 2004). There are also equally wide ranging but sometimes only partially related models of practice (e.g., supervisory, clinical, and educational models). The model/combination adopted by the practitioner will have implications for the nature of the goal to be achieved and the nature of the relationship that is likely between client and psychologist. These concepts are

explored further in the chapter to follow; for the meantime, the point is that, regardless of the model of intervention or practice utilised, it is important that the practitioner employs a consistent approach. Otherwise, as Lindsay, Breckon, Thomas and Maynard (2007) suggest, practitioners may find themselves to be ‘incongruent’ in terms of their professional philosophy. The importance of this can be illustrated further by considering implications of the practitioner’s professional philosophy.

2.3.3 Professional Philosophy

Poczwardowski et al. (2004) highlight that the consultant’s approach to service delivery is at all stages a function of their professional philosophy and that the practitioner’s theoretical orientation will underpin the “aim” of the support (e.g., performance enhancement, personal development, lifestyle issues etc). At a more fundamental level, Poczwardowski et al., suggest that personal core beliefs and values regarding the world and human behaviour form the foundation of an individual’s professional philosophy. Thus, the authors propose that these core beliefs and values influence the emergence of the theoretical orientation and should therefore be carefully addressed through on-going self-reflection. These authors also note that the service philosophy should clarify the consultant’s role, dependent on the theoretical framework used and the anticipated context of professional activity. Of course, this may highlight why practitioners approach the application of sport psychology in varied ways (i.e., the theoretical orientation may partly determine the practitioner’s role). Unfortunately, however, such variation may also reflect a consciously or unconsciously adopted eclecticism, or perhaps just pure ignorance of the importance of philosophical stance in the process of intervention. As such, the

practitioner's theoretical framework (or lack thereof) has direct implications for the potential structure, organisation, and coherence of support.

2.3.4 Atheoretical Eclecticism

Poczwadowski et al. (1998) suggest that an eclectic (or integrative) approach, although difficult to develop, "best fits the mission of applied sport psychology" (p. 199). This is supported by Young's (1992) argument that an eclectic approach can be synthetic, technical, or atheoretical (i.e., not to have a preferred theoretical framework, but to draw from many). However; this stance appears to be in contrast to the notion that the professional philosophy and theoretical orientation underpin the aim of support, the role of the consultant, and the context of the professional activity (as suggested by Poczwadowski et al., 2004).

The use of an atheoretical framework would therefore appear to be much more challenging in terms of producing a coherent package of intervention than selecting and following the core conditions of a particular theoretical orientation, particularly for novice practitioners. In the case of 'chosen eclecticism' which enables the practitioner to use different (but single) approaches with different clients, the practitioner would still technically require training in each of the orientations used. In any case, there is a notable difference between eclecticism between and within clients and/or phase of intervention. The first typifies the approach used by the majority of BPS-chartered counselling training courses (i.e., selecting the philosophical paradigm best suited to the aims of the intervention). The latter can reflect a 'pick and mix' approach to applied sport psychology which should surely be treated with a good deal more scepticism (for example, some of the 'menu' type

approaches to applied sport psychology suggested in the 1990's). Interestingly, the new BPS Qualification in Sport and Exercise Psychology (QSEP) Stage 2 Candidate Handbook suggests candidates have a broad understanding of "at least two different consulting philosophies or approaches" (BPS, 2010, p.17) but note that "case studies employing what has traditionally become labelled as an 'eclectic approach' are unacceptable for achieving the roundness of this training process". (p. 18).

The implications of adopting a particular theoretical stance (or not) can perhaps best be illustrated through consideration of the evaluation of applied sport psychology practice. In addition, the consideration of evaluation offers us a 'window' to effective practice as discussed in the following section.

2.4 Evaluation of Applied Sport Psychology

2.4.1 *Evaluation as a 'Window' to Effective Practice*

The evaluation of practice can be a 'window' into what practitioners regard as effective practice (i.e., what it is about our practice that we believe has had an impact on the client and led to achievement of the underlying goal (i.e., some relatively permanent behaviour change?) Thus, exploring evaluation methods, techniques, and strategies can provide us with deeper insight into what are considered to be the processes and characteristics of effective practice.

A critical review of applied sport psychology evaluation literature and research follows. This considers why we evaluate effectiveness and the current evaluation climate, how we are currently evaluating, and what exactly about our practice we are evaluating. The implications of this review will then be considered to provide the direction and rationale for the research presented in this thesis.

2.4.2 Why Are We Evaluating Effectiveness? Requirements of the Evaluation Climate

During the last two decades applied sport psychology has received significant and increasing attention from athletes, coaches, and the media. This is illustrated in the growing number of elite, professional, and amateur athletes who acknowledge working with applied sport psychology professionals (AASP, 2006). However, while the profile of applied sport psychology demonstrates healthy growth in the public's perception of its impact on performance, there is growing concern within the profession over whether we are providing evidence-driven models for understanding, conceptualising, assessing, and intervening with athletes (Gardner & Moore, 2006). This concern is being addressed in a variety of ways; for example, through professional development opportunities related to "consultant effectiveness" (e.g., BPS /BASES workshop, 2005). To date, however, there has been limited literature available on the evaluation of applied practice in sport psychology despite Streat's (1998) observation that effective evaluation of the efficacy of performance enhancement interventions is "among the most pressing needs in applied sport psychology" (p.340).

Attention to this "pressing need" is essential, not only for quality assurance purposes, but also to ensure that evidence for effective practice can be collated for evaluation purposes. Furthermore, without well-established and grounded methods of evaluation, the training of sport psychologists may draw more from the traditions of sorcerer's apprentice than professional development. In short, there is a need to further consider the formal evaluation and subsequent refinement of our practice if the increasing popularity of applied sport psychology is to be sustained and its efficacy enhanced. The development of literature in this area coincides with the

evolution of formal training and development requirements of practitioners by professional bodies (e.g., the formation of the Division of Sport & Exercise Psychology within the BPS, 2004; and the BASES new High Performance Accreditation, 2006).

External, market-force pressures add to these internal professional requirements. The increased accountability on those initiating and carrying out activities to improve the quality of public and private services means, in turn, that the applied sport psychologist is also increasingly accountable for their practice (Kelly, 2004). In addition, with the formation of National Institutes of Sport, the level of project management has intensified in high performance environments. For example, explicit outcomes in relation to stated objectives are required and regular feedback on the effectiveness of support work is expected. Indeed, as lottery funding in the UK has reached a plateau, the justification for sport science support per se is required to be both evidence-based and demonstrably cost effective (e.g., UK Sport's 'no compromise' philosophy, UK Sport, 2010).

Pertaining to the UK situation, Anderson, Miles, Mahoney and Robinson (2002) argued that the sport psychologist is directly accountable to four stakeholders (the athlete, the secondary client, themselves and the profession) and they proposed that the aims of evaluation "should be to document effectiveness and facilitate improvement so that sport psychologists can be directly accountable" (p. 436)...to these stakeholders. Anderson et al.'s (2002) paper on evaluating effectiveness in applied sport psychology provides the most comprehensive coverage of the issues surrounding the topic in recent years, and provides a sound basis for continued debate. However, as suggested throughout the rest of this chapter, a number of

unanswered questions still remain: for example, whether the ‘indicators of effectiveness identified capture the full range of sport psychology consultancy (See Section 2.4.4).

More recently, Gardner and Moore (2006) published a review of the evidence base for the efficacy of the major interventions in applied sport psychology. These authors applied criteria established for determining efficacy in clinical trials to determine the efficacy of applied research interventions in sport psychology. It is important to clarify the distinction here between efficacy and effectiveness when considering the contribution of this review to the literature. While the term ‘efficacy’ relates to the evaluation of an intervention in a controlled research setting, ‘effectiveness’ relates to evaluation within a practice setting (Anderson et al., 2002). The review concluded that “the empirical research on these interventions provides little guidance for the practitioner interested in best-practice procedures” (p. 83); however, it is also recognised that “regardless of the efficacy of an intervention, these categorisations are not meant to completely replace a practitioner’s personal decision on the best intervention for a client” (p. 69).

While determining the efficacy of interventions is clearly a worthy pursuit, further investigation and understanding of “practitioners’ personal decisions” may offer enhanced clarity to the complexities of evaluating effectiveness, whilst also addressing some of the unchallenged assumptions and unresolved issues still present in this important area.

2.4.3 How Are We Evaluating? An Overview of Current Formal Evaluation

Procedures

The current evaluation procedures utilised in applied sport psychology practice generally fall into three categories: client evaluation, peer evaluation/review and self evaluation. Within these categories, both more and less formal procedures exist; examples of less formal procedures include athlete/coach feedback through conversation or letters of support. With regard to increasing accountability, however, there is currently a pressing need to consider and develop our ‘formal’ evaluation procedures, and this is where attention is now placed. ‘Formal’ procedures are generally accepted to be structured and systematic in their approach, with established guidelines as to how information should be gathered and presented. Standardised evaluation forms, case studies, and reflective practice are reviewed below on the basis that they represent a cross sectional example of commonly used formal evaluation procedures within each category. While these methods are neither all-inclusive nor exhaustive, they provide a starting point for such debate.

Client Evaluation – Standardised Evaluation Forms

The use of standardised evaluation forms has been identified as a formal approach to client evaluation of consultant effectiveness (Anderson et al., 2002); the most popular and well known of these being the Consultant Evaluation Form (CEF) devised by Partington and Orlick in 1987. This form, and variations of it, continue to be used heavily by applied practitioners, and are widely recognised as an appropriate means of evaluating consultants (e.g., Hardy & Parfitt, 1994; Poczwadowski et al., 1998; Vealy & Garner-Holman, 1998).

Despite their popularity however, whether these forms sufficiently cater for the current evaluation climate and the evolving nature of applied practice should be questioned. For example, the CEF is heavily weighted towards determining the existence of certain “favourable” consultant characteristics (e.g., willingness, openness, flexibility and trustworthiness) which are clearly considered key determinants in the assessment of consultant effectiveness. Yet, despite the CEF being derived from client feedback, the extent to which these characteristics are reflective of consultant *effectiveness* has been largely accepted uncritically in subsequent peer reviewed literature (e.g., how do these constructs indicate or precede effectiveness and where the evidence of causative impact is?). Furthermore, this emphasis has perhaps led us to evaluate constructs which consider the sport psychologist as a ‘nice person’ or a ‘good communicator’, rather than as an ‘agent of change’ or ‘promoter of performance’. It may be the case that, in accordance with their theoretical orientation, a practitioner may deliberately challenge the client and display characteristics considered (at least temporarily) to be unfavourable, but deemed appropriate by the consultant in line with their intentions for impact (e.g., disputing in REBT; Ellis, 2001). Indeed, Palmer (2005) suggests that certain approaches may conflict with many criteria included in consultant evaluation forms, but that “ultimately we’re not there to be liked, but to be effective.” (p. 13).

Another aspect of practice emphasised by the CEF is mental skills training; however, the generic nature of these constructs (e.g., ‘useful knowledge about mental training that seemed to apply directly to my sport’) results in the loss of vital detail (e.g., the context of the support program). Additionally, guidance on administering standardised forms (e.g., Partington & Orlick, 1987, p. 315 – 316) does not

distinguish between short-term “snap-shot” ratings and the possibility of long-term gain in the goals established between client and consultant. Thus, a practitioner may be working at a deep processing level with an individual, the results of which may only emerge over time to give rise to an enduring change in behaviour and/or cognition – a practice not uncommon in teaching and training (e.g., Entwistle & Waterston, 1988). However, this type of long-term emergent outcome is unlikely to be captured by the constructs included in the CEF, and certainly not if it is administered and analysed on a ‘one-time’ basis.

In summary, current uses of standardised evaluation forms such as the CEF do not appear to fully capture the breadth and depth of applied sport psychology practice (e.g., the spectrum of orientations, characteristics, and levels of outcome generated by practitioners). While CEF’s are often used in conjunction with other methods it is suggested that, in their current form, they are unable to present a comprehensive reflection of consultant effectiveness as gauged by the client.

Peer Evaluation/Review – Case Studies

Case studies are extensively used to formally document interventions or periods of support work with clients in applied sport psychology (e.g., Bull, 1989; Hardy & Parfitt, 1994; Ravizza, 1988; Rotunno, Senarega & Reggiani, 2004). In addition to this presence in peer-reviewed journals, detailed case studies significantly contribute to the evidence of effective practice necessary to gain Chartered status or Accreditation with professional bodies (e.g., BPS QSEP Stage 2 Candidate Handbook; BPS, 2010 and BASES Accreditation Criteria; BASES, 2007).

Although the exact requirements of case studies vary, generic structures exist which include: a needs analysis, the generation of aims, an intervention strategy

(along with associated scientific rationale), the provision of scientific data, an evaluation, and long term recommendations (e.g., BASES, 2007). However, while case studies provide a platform for reviewing ‘what’ we did and the associated scientific rationale for this; traditionally, less emphasis has been placed on the exploration of and justification against alternative courses of action (i.e., ‘why this and not this’). As such, there is currently very little, if any, consideration afforded in case studies to the ‘decision making’ engaged in by the consultant as a feature of the issue conceptualisation, intervention design, implementation and ongoing refinement; this is certainly not an explicit requirement in the guidelines encountered thus far.

In a similar vein, although a case study may document the practitioner’s theoretical orientation or professional philosophy and provide a rationale for this approach, little, if any, insight is traditionally offered into the mechanics of how this orientation and/or philosophy shape the applied practice. This is especially pertinent given that weak internal validity is considered a major problem with the case study approach (Anderson et al., 2002). Since the first time of writing, the new BPS QSEP Stage 2 Candidate Handbook states that candidates reporting consultancy case studies should illustrate and stay true to the consulting philosophy adopted in (BPS, 2010).

Self Evaluation – Reflective Practice

The most topical formal self-evaluation procedure in applied sport psychology is currently reflective practice and the case, processes, and models for reflective practice have been both well documented (e.g., Anderson, Knowles & Gilbourne, 2004) and promoted (e.g., the BASES HPS accreditation requirement for

critical reflection on professional practice for every session across the five year period). However, there remains scope to further establish the specific content and purpose of such reflection. For example, while a practitioner may be familiar with why they should reflect, when they should reflect, and how they should reflect, there is not a lot of information on *what* exactly about their practice they should be reflecting on and against *which criteria*, in order for them to find evidence for their effectiveness and, presumably, make changes as a result.

Other professional fields have experienced similar issues with guidance on the specifics of reflective practice. For example, teaching literature in the 1990's stated that "reflective practice has yet to be defined clearly" (Ross, 1990, p.113) and that while it has been much discussed "it's implications for evaluation have not yet been appropriately explored in any detail" (Reagan, Case, Case & Freiberg, 1993, p. 264). In exploring the characteristics of the reflective practitioner, Reagan et al. (1993) identified that, first and foremost, the reflective practitioner is a decision maker. This position was originally stated by Case, Lanier and Miskel (1986) who suggested that professionals "use their knowledge, judgment and skill within the structures of the ethical code of the profession..." (p. 36). Since then, of course, reflective practice has gone on to become a significant pillar of professional practice in teaching, nursing and other professions, although interestingly as a formative (you use it to develop your own practice) rather than a summative (we want to see and presumably evaluate your reflections cf. BASES).

The field of applied sport psychology can learn from lessons experienced in these other professions. For example, the philosophy of the reflective practitioner as primarily a decision maker can be directly transferable to applied sport psychology,

as practitioners are required to make many different kinds of judgments and decisions throughout their practice (e.g., regarding technical, educational, and ethical issues). If this is so, then the justification of action should inextricably involve a critical analysis of reflective, rational, and conscious decision making (Reagan et al., 1993). This process is yet to be fully encapsulated by reflective practice procedures in applied sport psychology however (i.e., what about our decision making should we reflect on?)

This overview of existing formal methods of evaluation illustrates that some practice gaps do exist but also that there is scope to build on these existing methods. However, in the pursuit of discovering more about what are considered to be the processes and characteristics of effective practice; it is important to discuss just “what” our existing procedures are actually evaluating.

2.4.4 What Are We Evaluating? Indicators, Processes and Outcomes

The applied sport psychologist has at their disposal a wide variety of constructs to potentially evaluate, these include: consultant characteristics, relationships and rapport, mental skills development, needs analysis, scientific rationale, implementation strategy, scientific data, athlete report, coach feedback and performance measures. This list is by no means exhaustive, but it does provide an indication of the wealth of constructs available for evaluation. What is less obvious, however, is *which* combination of these constructs should be used in each particular circumstance, or indeed, *how* any such permutation would provide us with an indication of effectiveness.

Effectiveness Indicators

Anderson et al. (2002) have provided us with the most comprehensive description of effectiveness indicators to date. The authors identified four broad indicators to evaluate generic practitioner aims; namely, quality of support, psychological skill and well-being, athletes' responses to the support, and performance. These indicators provide a sound basis for discussion and debate, but still do not provide full coverage of the issues to be considered. For example, while generic aims were adopted for the purpose of the paper, the authors state that "it is likely that the aims of applied sport psychology practice will differ from case to case" (p. 440). To build on this, it is suggested that indicators of effectiveness must be directly related to client-specific objectives framed by the practitioner (normally in partnership with the client) at the initiation of the intervention (i.e., "have we achieved what we set out to do?"). As such, generic aims and indicators can only represent the starting point of such a process. Additionally, whilst the indicators identified are important, it is suggested that they do not represent the full picture of what can indicate effectiveness in applied sport psychology practice. This position will be demonstrated through consideration and discussion of 'process' and 'outcome' measures of evaluation.

Defining Terms

In line with evaluation procedures used in medicine, clinical psychology, counselling and psychotherapy (e.g., the Hill Process Model, Hill & O'Grady, 1985; and session outcome measures, Greenberg, 1986) it is proposed that use of the terms "process measures" and "outcome measures" would be valuable in extending our conceptualisation of evaluation in applied sport psychology. To clarify these terms,

“process measures” measure some aspect of the process of intervention that was performed, and “outcome measures” measure the performance of the intervention (as defined by Eddy, 1998). It is suggested that these terms are meaningful to identify what individual measures of effectiveness are actually evaluating.

The Process/Outcome Dichotomy

Consideration of the broad effectiveness indicators identified by Anderson et al. (2002) illustrates that the distinction between process and outcome can be less than precise. For example, while “performance” can be clearly identified as an outcome measure and “quality of support” as a measure of process, the remaining two indicators (“psychological skill and well-being” and “athlete responses to support”) are less obvious to classify. The definitions above offer some assistance with categorisation, as does the consideration of *how* and *when* Anderson et al. (2002) suggest these indicators should be evaluated. Both “psychological skill and well-being” and “athlete responses to support” are described as events involving change and are suggested to be evaluated using such procedures as psychometrics, profiling, and exams or tests. This position and the proposal that they be evaluated toward the end of support would suggest they are more measures of outcome than process; however a level of ambiguity remains.

Reviewing our current formal evaluation procedures reveals an equally mixed bag of process and outcome measures. The majority of constructs included on the CEF (Partington & Orlick, 1987) are measures of process (i.e., consultant characteristics) while the few that mention making performance better or more consistent may be considered to be measuring an element of outcome. Both case studies and reflective practice may be considered to be predominantly concerned

with measuring the process of support, although measures of outcome are often offered in support of quality practice. Following the identification of *what* our existing procedures are actually measuring, the next step is to consider how comprehensively we are addressing both process and outcome measures of evaluation.

Process Measures

Process measures identified include the “quality of support” indicator along with the majority of constructs on standardised evaluation forms, large sections of case studies, and the main body of reflective practice material. Anderson et al. (2002) suggest “quality of support” is comprised of consultant effectiveness and social validity. Consultant effectiveness is considered to consist of knowledge, delivery style, and consultant characteristics; while social validity centrally concerns levels of satisfaction with the service. A noticeable absentee among this list of constructs is the process of practitioner decision making which would place the aforementioned factors in context with the practitioner’s theoretical orientation and model of intervention.

The gaps in the use of standardised evaluation forms, case studies, and reflective practice to comprehensively measure process have already been highlighted. As a reminder, arguments here are based around consultant characteristics being an insufficient measure of effectiveness without a supporting theoretical or philosophical rationale for why these characteristics in particular have been displayed, and that again PJDM is a crucial, yet somewhat absent feature of process study and reflection.

Outcome Measures

Outcome measures identified include “psychological skill and athlete well-being”, “athletes’ responses to support”, and “performance” (Anderson et al., 2002); each is now considered in turn.

While psychological skills training is traditionally regarded as a central pillar of our practice, applied sport psychologists are increasingly working more extensively outside this area (e.g., talent development, Martindale, Collins & Daubney, 2005; career transition adjustment, Lavalley, 2005; and the detection and amelioration of overtraining syndrome, Meehan, Bull, Wood & James, 2004). It is therefore essential that outcome measures be extended beyond the assessment of psychological skills in order to evaluate the breadth and depth of such necessarily varied practice. For example, standardised psychometric tools are unable to capture the full range of support that may be provided out with the area of mental skills training.

Athletes’ responses to the support received are essential to accurately gauge effective practice; however, this need not necessarily be restricted to a change in knowledge, psychological skill, attitude, or adherence as Anderson et al. (2002) suggest. Certainly, we may expect clients to experience enhancement of overt and/or covert processes, but these may also arise from changes to insight, perception, conceptualisation or understanding of their situation; influences which the current indicators would not capture. As such, exams or tests seem inappropriate as a means of gauging athletes’ responses, especially as they may not be fully aware of how such changes are manifest.

As Anderson et al. (2002) suggest, performance is the ultimate marker of outcome. The contention that objective performance should be accompanied by athletes' subjective assessment of what was experienced during performance is also supported (Holder, 1997), especially as peak performances are often attributed to a state of "being" rather than a state of "doing" (Jackson & Csikszentmihalyi, 1999). Additionally, these subjective reflections can provide insight into the perceived impact of sport psychology support on performance. It has traditionally been difficult for cogs in the 'support wheel' to show individual contribution, and this is especially true for psychology which inherently involves covert as well as overt processes, often associated with implications across the performance support spectrum. Indeed, this 'partialling out' of each discipline's input may neither be possible nor desirable as the attempt to disaggregate the contributions is not only likely to fail but may be directly harmful to the integrated whole (Collins & Collins, in press). Ultimately however, the person who is seeking performance improvement will know far better than practitioners or any outside observers, where he or she has found it and these subjective reflections of athletes provide that vital insight (Sutton, 1989).

2.4.5 Evaluation of Applied Sport Psychology: The Implications

In order to draw out the implications from this review of evaluation in applied sport psychology it is necessary to ask: what does it tell us about practice? In answering this question, it appears the implications are two-fold.

Firstly, the review of current formal evaluation procedures suggests that they are not capturing all the intricacies and complexities of applied sport psychology practice nor of the evolving evaluation climate. In addition, current 'effectiveness

indicators' do not capture the full array of constructs on which the practitioner may impact, nor do they evaluate the breadth and depth of increasingly varied practice. This carries important implications for how comprehensively we are evaluating applied sport psychology practice and subsequently for how effectively we can justify its impact.

Secondly, the review of evaluation literature as a 'window to effectiveness' reveals that there is scope to develop how comprehensively client issues are conceptualised by practitioners, and how this conceptualisation subsequently shapes and guides practice. Certainly, there appears to be a lack of vocabulary and framework for communicating the complexity of this conceptualisation. Perhaps due to scarcity of literature regarding issue conceptualisation; the work carried out by applied sport psychologists and the perceptions and expectations of clients appears to be inconsistent. This is not necessarily bad news; indeed, it may be essential for the field that a range of practitioners can deliver a range of types of service to suit the needs of the client. Despite this inconsistency, however, there is scope to ensure that all practitioners (regardless of orientation) are comprehensively conceptualising their practice to ensure coherence and sound rationale for their actions.

2.5 What's Missing?

This review of evaluation literature in applied sport psychology demonstrates that there is scope to further explore and conceptualise the process of what we do as applied sport psychologists. In support of this, Petitpas, Giges, and Danish (1999) have highlighted that few studies have examined the specific factors in the process of

service delivery that might enhance the athlete's efficacy and contribute to successful outcomes.

2.5.1 Reflection on Decision Making

If the process of applied sport psychology service delivery requires further exploration then researching practitioners' decision making would provide a unique insight into how they conceptualise what they do. As this would appear to be a central facet of applied psychology practice then, in turn, it should also be a central facet of what we are evaluating. The case for researching PJDM will be explored in depth in the next chapter; however by way of introduction the following section considers how it may be manifest in applied practice.

2.5.2 Issue and Intervention Conceptualisation

Poczwadowski et al. (1998) highlighted that, within the provision of sport psychology support, assessment often naturally leads to the intervention and that researchers may have neglected discussing the mediating process of issue conceptualisation. As conceptualisation of the clients' concerns drives the proposed intervention, it is likely to determine the success of overcoming the particular concern and, ultimately, the quality of the support received. As such, it could be argued that the conceptualisation of the 'issues' is what distinguishes between a good sport psychologist and an exceptional one. Given how vital this phase of support would appear to be it is surprising that there is little or no research into the way in which sport psychologists' do this (i.e., the decision making processes that are undertaken in order to generate a solution or a framework of solutions).

The sport psychologist's conceptualisation of the client's concern is likely to be influenced by many factors, for example: theoretical orientation and/or level of eclecticism applied; past experiences of similar concerns/issues; utilisation of "tacit" knowledge; perception of the client's strengths and weaknesses; and perhaps most importantly, the depth of processing undertaken to consider underpinning issues or tendencies (e.g., whether change is sought at a surface or deep level; Marton & Saljo, 1984).

Once the concern has been accurately conceptualised, the sport psychologist can use their knowledge and skills to design an appropriate intervention. In order to tailor this to the individual's needs, a degree of creativity is required and a willingness to expand the boundaries of intervention use (while keeping within the bounds of scientific rationale) to generate cutting edge sport psychology support.

2.5.3 Importance of the Relationship

A further aspect of practice that has not perhaps received the recognition it deserves in applied practice research is the importance of the relationship or working alliance. The term "working alliance" has been coined from the 'therapeutic alliance' prevalent in counselling literature and practice. Osachuk and Cairns (1995) refer to the working alliance as the collaborative relationship between counsellor and client in which both parties are working together to address whatever concerns are impeding the growth and healthy functioning of the client. The ability to establish a working alliance is reported to be related to treatment adherence and positive outcomes (Petitpas et al., 1999) and the primary factor that accounts for the clients' willingness to work through the plateau's and setbacks that frequently occur during

the course of therapy (Gelso & Fretz, 2001). The nature of the working alliance has extensive implications for sport psychology support and can therefore be regarded as critical to the success of service provision. In this regard, it has been recognised that discussing techniques in themselves will not advance sport psychology as a discipline, but discussing the delivery of techniques will certainly lead to progress (Simons & Anderson, 1995).

It has previously been highlighted that, in seeking to understand the dynamics of the client-consultant interaction, sport psychology can gain considerable insight from counselling psychology (Petitpas et al., 1999). For example, Sexton and Whiston (1994) noted that of all the techniques studied with respect to the mechanisms responsible for successful outcomes from interventions, only the client-counsellor relationship has consistently been related to positive therapeutic results. In keeping with this, Anderson (2000) suggests that examination of the process of consultant-athlete interactions is needed in order to understand more about the delivery of sport psychology services.

It has been established that change resulting from counselling psychology is more likely to occur when a good relationship exists between the practitioner and the client, and when the client collaborates in the decision about what strategies will be employed (Meichenbaum & Turk, 1987). As the position adopted in this thesis is that applied sport psychology is fundamentally about facilitating change in cognition and behaviour in order to improve performance, then the relationship between client and practitioner is likely to be of vast importance.

If the client-consultant relationship is considered to be a vehicle for change (depending on theoretical orientation) then we should consider how it influences the

success of our support and the validity of our evaluation procedures. A fascinating question is how much “change” within the client can be attributed to the impact of the client-consultant relationship? Or in other words; what does the sport psychologist provide that actually has an impact on the athlete/client leading to a relatively permanent change towards improvement? For example, is it techniques, tools, skills, a confidential sounding board, challenging dialogue, a positive coping role model, or some combination of these and other factors?

Bordin (1979) identified three factors that come together to create the working alliance: agreement on goals, agreement on tasks, and the development of an emotional bond between the counsellor and the client. If a similar alliance is considered to be productive within sport psychology this involves a heavy investment on behalf of the consultant and, as such, the profession has a responsibility to ensure that our practitioners are sufficiently trained to understand, create, maintain and manage such an alliance.

2.5.4 Training Considerations

If important concepts are missing or underdeveloped in practice, then it follows that these too will be missing from current training procedures. A key consideration is whether current novice training practices are developing the factors which are influential in bringing about client change, either through knowledge bases (e.g., regarding implications of theoretical orientation) or via the training environment (e.g., problem-based learning). Furthermore, a focus on developing practitioner decision making and, in particular, issue conceptualisation would appear to be

worthwhile. In addition, the importance of the relationship in establishing effective working practices could be further emphasised.

A vital requirement for performance enhancement is feedback and Petitpas et al., (1999) suggest that practitioners receive feedback about the advantages and disadvantages of their interpersonal style to eliminate any potential blind spots. This is particularly relevant given the importance of establishing a good working alliance. It would be extremely beneficial for the probationary sport psychologist to have indicators from which to gauge their performance effectiveness. At present this is (or at least should be) provided by a supervisor, who is likely to be limited in their awareness of the supervisee's interactions, through clients' self reported feedback, or in some instances, not at all. This responsibility is all the harder given that telling someone that their personality is not suited to their chosen orientation (or even profession) is never likely to be a popular message.

Current accreditation procedures in the UK involve the probationary sport psychologist submitting a portfolio of evidence to demonstrate that they have achieved the desired level of knowledge or experience outlined under competency headings (e.g., BPS, BASES). There is a noticeable bias towards keeping a record of what has been accomplished over how well the tasks may have been performed. Although the recent trend to incorporate reflective practice has enhanced the reporting of what has been learnt from experience, this also fails to offer a qualitative evaluation of the impact on clients; a surprising omission given the imperative on performance implicit within UK Sports' funding of BASES accreditation.

There are also other apparent omissions or unexpected weightings. The specific practical experiences requested as part of BASES' accreditation system include a

range of sport, interventions and populations; experience of the performer and coach's situation; practical work as a sport psychologist and practical experience of other sport sciences. However, it remains surprising that, out of the total 31 sections and sub-sections of the BASES supervised experience competency profile, practical work as a sport or exercise psychologist comprises just one and within this there is no mention of decision making (BASES, 2007). In fact, the recently revised competency profile (BASES, 2009) includes a new key section on "problem solving and impact" which may have been influenced by literature generated as part of this research area. In addition, the new BPS QSEP Stage 2 Key Roles incorporate ethical decision making (Key Role 1.3e), but there is no mention of decision making in the core consultancy competence, most noticeably in planning for consultancy (BPS, 2010).

Furthermore, the lack of evaluation which trainee sport psychologists are required to make of their own support work in order to complete supervised experience is perhaps reflective of the importance perceived by the accredited population. It has been highlighted in several forums that we must undertake more systematic evaluation of the services we provide in order for the profession to develop (e.g., Biddle, Bull & Scheult, 1992). In order to breed these habits of good practice, training and accreditation procedures could be updated to place more emphasis on the skills of evaluation and refinement. Again, since writing the first drafts of this chapter the revised BASES competency profile now includes more comprehensive coverage of self evaluation and professional development (BASES, 2009). In addition, the new BPS QSEP Stage 2 Qualification Handbook outlines that candidates are required to keep a Practice Diary and Reflective Log although the

extent to which evaluation of their own work is a part of this is not clear (BPS, 2010).

2.6 Research Directions and Methodological Issues

Strean and Roberts (1992) highlighted that the research aspect of applied sport psychology had largely been ignored and well over a decade later it is still considerably underexposed given the significance of the implications for the development of the profession. This review of current practice within the UK has highlighted several key areas in need of attention and development through applied research. Firstly, the consideration of specific service delivery factors (e.g., issue conceptualisation) in applied sport psychology that might enhance athletes' efficacy and contribute to successful outcomes, previously noted by Petitpas et al., (1999) to be an area with few studies. Secondly, the ways in which sport psychologists demonstrate the effectiveness of their interventions and reflect on their support. Thirdly, the development of the training experience in order to ensure future generations of sport psychologists are equipped with the skills and experiences necessary to provide, manage and evaluate world-class support.

These research areas present considerable methodological challenges, which may go some way to explaining why attention to them is so long overdue. We know that there is a tendency to study what we know how to study or what we can study relatively easily rather than what is of importance to the conduct of our professions (Greenberg, 1986). Despite these inherent difficulties, the use of creative research methods is expanding and it is increasingly recognised that qualitative analysis through case studies and person-by-person interactions is crucial (e.g., Strean &

Roberts, 1992; Greenberg, 1986, Anderson et al, 2002.) See Chapter 4 for more detail.

2.6.1 The Goal to Understand Psychological Processes

Strean and Roberts (1992) also expressed the concern that in our quest to be scientific, we have lost sight of our goal to understand psychological processes in sport. The authors ask “if sport psychology researchers do not have control groups, are their data worthwhile?” They answer by suggesting that the success of much applied research is contingent upon utilising intact groups, employing quasi-experimental designs, and accessing the experiences of athletes in ecologically valid manners. It is stated that the case-study procedure of assessing our interventions in sport psychology is under used and entirely relevant. The authors challenge us to use divergent methods and to realise the potential of less conventional methods. For example, they recommend that applied sport psychology research should consider more analysis of person-by-treatment interactions, which may be particularly crucial to our understanding of the efficacy of our interventions. It is also highlighted that all information needs to be processed and acted upon within a dynamic, interpersonal relationship of consultant and athlete. This goal to further understand the psychological processes of practice has driven the research methodology employed in this thesis (see Chapter 4 for further detail).

2.6.2 *Qualitative Validity*

Strean (1998) extends the conversation regarding the future of qualitative inquiry in applied sport psychology by discussing specific ways in which we may put it to good use. The authors suggest good qualitative research can illuminate the previously unknown or tenuously known, provide familiarity through rich description, and explode faulty understandings. As such, a qualitative methodology would appear to be most appropriate for further exploring the processes and characteristics of effective applied sport psychology. Peshkin's (1993) discussion of the "goodness" of qualitative research along with other issues related to the validity of qualitative enquiry will be explored further in Chapter 4.

2.7 Further Research: What Can We Learn?

This critical review of literature has established that the work carried out by applied sport psychologists is inconsistent as are client perceptions and expectations regarding support. Given the range of practitioners and the diverse and varied nature of practice, this is not necessarily bad news and may be essential for effective service delivery. However, it is imperative that we further understand, document, and conceptualise what we are doing as applied practitioners and why we are doing it.

Further research in these areas could contribute to the preparation of novice practitioners in terms of training requirements, for example the development of PJDM expertise. In addition, further understanding of the dynamics of applied practice could enhance the process and outcome of evaluation procedures in applied sport psychology. This would offer support to Strean and Roberts' (1992) suggestion

that “to be taken seriously by other professionals, sport psychology consultants must begin to demonstrate empirically the effectiveness of their interventions” (p. 62).

Furthermore, the current gaps in practice (i.e., what’s missing) can be refined by considering ways to delineate, develop and refine the rationale for why practice is inconsistent (i.e., how practitioner’s conceptualise what they do). The objective of this research is not to look for homogeneity across practitioners, but to encourage coherence of practice and a deeper level of conceptualisation regarding overall practice and the process of change.

The next chapter illustrates some of the possible outcomes and implications for applied sport psychologists from consideration of PJDM research in other fields such as medicine and teaching and in parallel disciplines such as clinical and counselling psychology. It will investigate the nature of decision content and how the crucial “intention for impact” (Hill, 1992) is formulated. From this analysis, implications can be drawn for the evaluation, reflective practice, and professional development and training of applied sport psychologists.

Chapter 3. A Focus on PJDM

3.1 Introducing PJDM Practice and Research

Members of a profession have been characterised as having autonomy or discretion in respect of their PJDM (Evetts, 2001). In addition, one of the ‘5 key benchmarks’ of a profession states that a high degree of individual autonomy and independence of judgment is required for effective practice (Carr, 1999).

Accordingly, “self-regulating” occupations have been increasingly monitored by their professional institutions. This development acknowledges the need for control of professional work, practices and practitioners, and is reflected in monitored education and training requirements, awarded and renewed professional licenses, and controlled aspects of professional practice. Indeed, these practices and others are endorsed by the national and international professional bodies responsible for monitoring the practice of applied sport psychology (e.g., BPS, BASES, AASP) and form part of the expanding quality control process.

However, while applied sport psychology and the wider ‘parent’ disciplines of psychology and applied sport science have recognised that professional autonomy and/or discretion brings with it the need to train, regulate, and evaluate practice and has made advances accordingly, research into **how** this professional judgment is formed and the process or chain of decision making itself has not received concurrent attention on a similar scale.

Given that applied practice is largely a series of decisions in terms of assessing which issues require attention, setting goals, finding or designing suitable courses of action, and evaluating and choosing among alternative actions (Simon,

1986) this would appear to be a particularly insightful line of enquiry, with substantial benefits potentially available. Indeed, Simon goes on to suggest that there are no more promising or important targets for basic scientific research than understanding how human minds solve problems and make decisions effectively. Unsurprisingly therefore, research into PJDM has received substantial attention in the past half century in a range of fields including medicine, law, economics, political science, cognitive science, psychology, teaching, artificial intelligence, and the military (e.g., Simon, 1986; Husted & Husted, 1995; Evetts, 2001).

Underlying this surge in attention is the need to understand how overriding aims and client needs (underpinnings respectively for the generic and specific aims of an intervention) are catered for in the practitioner's decision making processes, and how these then form and underpin the behaviour, content, and method employed in subsequent actions, both long and short term. In teaching, for example, the effectiveness of actions selected during this multi-faceted process, has been reported to hinge on the decision making prowess of the professional (Curtner-Smith, 1999). Most pertinently, PJDM permeates all levels and timescales of behaviour in these professions. Thus, for example, teaching decisions may be made at a planning level where curriculum aims are operationalised into syllabi, lesson plans, and methodological patterns (Thorburn & Collins, 2003). At the other extreme, these same decisions are applied and extended in second by second choices made reactively and proactively in class interactions with pupils (Griffey and Housner, 1991).

Accordingly, the examination of PJDM at all levels has considerable potential for guiding and/or underpinning the planning, conduct, and real-time adjustment of

professional behaviour. Furthermore, the efficacy of this decision making process is increasingly acknowledged as a major factor in the eventual efficacy of action. For example, studies of medical expertise have found a strong correlation between forward reasoning and accuracy of decision making (e.g., Patel & Ramoni, 1997).

Therefore, the aim of this chapter was to demonstrate that the possible outcomes and implications of PJDM research for applied sport psychology are both vast and potentially powerful. For example, investigation into the nature of decision content and how the crucial “intention for impact” (Hill, 1992) is formulated carries implications for the assessment, reflective practice, professional development and training, and therefore the eventual impact of applied sport psychologists. Further, understanding of PJDM process is likely to demonstrate our limits of rationality, choices under uncertainty, how we deal with ill-structured problems, and the role of intuition (Simon, 1986). All these factors support the need for greater knowledge and understanding of PJDM in applied sport psychology.

Importantly, research in this area could clarify the multi-faceted and multi-dimensional nature of PJDM in applied sport psychology, supporting the development of our current training and regulation requirements, and illustrating the place for a spectrum of practitioners with differing learning histories and from differing theoretical orientations. Clarification of the procedural and declarative understanding required to make informed decisions (using a task analysis approach for example, Greenberg, 1991) and to carry out effective practice will also perhaps challenge any over reliance on generic tools. Hopefully, our profession has substantially moved on from an “if X then Y” recipe approach to service provision,

in which the client may literally choose from a menu of “solutions” to what are regarded as generic difficulties.

In attempting to realise these goals, and present the case for PJDM as an important topic for consideration, the chapter is structured in the following way: the first section explores the nature of decision content in applied sport psychology; in other words, which factors are considered in making the eventual decision. The complexity involved will be illustrated by considering how two of the many primary factors are established - the nature of the goal and the nature of the relationship. The second section introduces the concept of “intention for impact” (Hill, 1992) to applied sport psychology as a construct to aid our conceptualisation of the complex processes within PJDM practice and research. Some initial implications that consideration and research into intention for impact may bring are then offered in three areas of applied sport psychology: assessment, reflective practice, and professional development and training. Finally, the chapter considers future directions in PJDM research, including some of the potential benefits and methodological challenges.

3.2 The Nature of Decision Content in Applied Sport Psychology

A multitude of factors should be considered in the associated planning, conduct, and refinement of an applied intervention. To illustrate the complexity involved, the following section explores a range of the factors which influence decision content. For brevity, some of the constituent parts are considered for the establishment of two primary decisions that a practitioner will inevitably encounter when working with a client and that carry acknowledged importance (e.g., Dryden,

1989; Petitpas et al., 1999; Simons & Anderson, 1995). These decisions concern the nature of the goal and the nature of the working relationship established.

3.2.1 The Nature of “The Goal”

Taking into account that practitioners may have differing over-riding ‘goals’ for applied practice (e.g., performance, well-being etc.) the most significant contributor to the practitioner’s construction of the goal for support should be the client’s needs. The assessment of client need is likely to be comprehensive and based on a multitude of factors which include pre-existing variables (e.g., personality, demographics, motivation and, most importantly, the presenting issues), and contextual variables (e.g., client readiness, working alliance, and stage of support) amongst others (Hill, 1992). It is the interaction between these pre-existing practitioner and client variables, along with the contextual variables of support, that the applied sport psychologist is required to conceptualise, make sense of, and make decisions about in order to determine the nature of the goal constructed.

Despite all these and other variations in applied practice, the common thread is that, whatever the philosophy for the approach taken, the goal selected and the way in which the service is delivered, the practitioner should have arrived at their stance through a series of decisions based primarily on consideration of their client’s needs. In this regard, Poczwadowski et al., (1998) note that the service philosophy should clarify the consultant’s role, depending on the theoretical framework used and the anticipated context of professional activity. For some, these decisions may have been taken more explicitly than for others. To illustrate this further consider that the professional philosophy adopted by the practitioner has direct implications, not just

for the underlying goal of support, but also for the subsequent decisions and judgments made regarding the set up of support and the delivery of their service. For example, practitioners may see themselves as working toward the development of their client, the empowerment of their client, the comfort of their client or some combination of these and other objectives (Kremer & Scully, 1998). The subsequent times scales to which the practitioner will operate will depend on this philosophy and the context of the support programme; so they may be working toward long term benefits for the client or more short term solutions. This, in turn, will affect the level of processing (Craik and Lockhart, 1972; Marton & Saljo, 1984) that the practitioner will encourage the client to engage in, dependent on whether change is sought at a surface or deep level, or indeed, across these levels (Entwistle and Waterston, 1988). It is therefore essential that this series or chain of decisions (representing the rationale for the approach taken) is established prior to any intervention and that subsequent actions are refined to be coherent with the overriding goal and with the rationale for this approach.

Following on from the nature of the goal, a further illustration of the complexity involved in the nature of decision content in applied sport psychology is now provided through considering the nature of the relationships that can be established with clients.

3.2.2 The Nature of 'The Relationship'

Presuming that the goal is clarified and genuinely based on client need, the nature of the client-practitioner relationship and therefore the working alliance

established are also both largely influenced by the practitioner's theoretical orientation and professional philosophy (Weiss, 1991; Shertzer & Stone, 1968).

The range of theoretical orientations a practitioner may decide to adopt in the application of sport psychology is broad and includes Person-Centred, Humanistic, Behavioural, Cognitive-Behavioural, Rational-Emotive Behavioural, and variant subsets and blends of these; each with their own set of very different guidelines for how to set-up, engage, and interact with the client. Considering these differing approaches on a continuum illustrates the differences in the type of support the client may expect to receive, for example, the nature and extent of the direction provided, and external resource provision versus exposure and elaboration of the client's already existing personal skills.

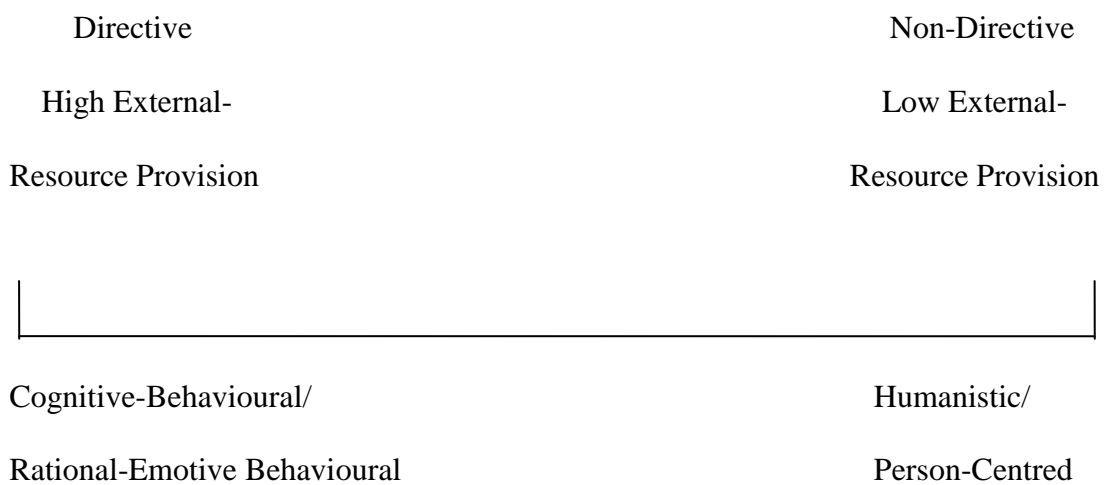


Figure 3.1. Continuum of applied sport psychology theoretical orientations: with consequent direction and external resource provision.

At the Humanistic end of the continuum, support is more likely to be nurturing, reassuring, and non-directive in its nature in order to make the client feel more comfortable. For example, Cockerill and Tribe (2002) report that a person-centred approach, rather than prescribing what the athlete should do, helps the individual to explore their present situation and identify where they want to go, and then facilitates this as far as possible. By contrast, toward the Cognitive-Behavioural end of the continuum there is more external resource provision received by the athlete (e.g., education, skills, and strategies). This type of support is likely to be more challenging to the client as change is sought through deliberately taking the athlete out of their comfort zone and moving them on (for example, a technique commonly used in Rational Emotive Behaviour orientations is to actively dispute the client's thoughts and beliefs). Indeed, at the elite level, such movement may (perhaps essentially) take the athlete to places where no one, including the coach, has been before. As such, this stance would question the premise that *all* of the necessary resources lie within the athlete; to transcend perceived ability, some external provision would seem inevitable. Of course this is not to say that some practitioners will not be concerned for the athlete's quality of life, but rather that their primary objective may be to facilitate performance improvement. For the present purposes, however, the key point is that the perspective chosen is just one of a series of important decisions.

Taking this on, the continuum would suggest that once a decision has been taken regarding which theoretical orientation is being adopted, the personal characteristics required of the practitioner will, by definition, have to reflect this approach. So, while a Humanistic practitioner will use a non-directive approach with

a client, a practitioner operating from a Cognitive-Behavioural approach is required to be more directive and may deliberately challenge the individual as deemed appropriate. As such, the decision regarding which theoretical orientation is adopted calls for the practitioner to make subsequent professional judgments about the type of approach taken, the characteristics displayed, and the nature of the relationship established, all of which should be coherent with the selected orientation.

Importantly, this is the case regardless of which theoretical orientation or variation thereof is adopted. Indeed, despite recent reports of “a movement away from problem centred approaches to humanistic athlete-centred approaches in recognition of the central role of the practitioner in successful practice” (Anderson et al., 2004 p.189) it is suggested that practitioners from the full spectrum of theoretical orientations give a great deal of consideration to their role and to the nature of the relationships they establish (e.g., Petitpas et al., 1999). Although it is certainly the case that differences exist in the extent to which the relationship itself is considered to be an essential, or even transformative condition for facilitating change rather than a necessary, though not sufficient, pre-condition to change (Hazler & Barwick, 2001).

3.2.3 Summary of the Nature of Decision Content in Applied Sport Psychology

Consideration of the nature of the goal and the nature of the relationship established illustrates that the practitioner is required to make key primary decisions regarding their practice (for example regarding professional philosophy and theoretical orientation) and that these decisions should initiate a chain of subsequent professional judgments and decisions in order for practice to operate in a coherent

manner. Applied sport psychologists are required to be able to provide a rationale for their actions in order for them to be deemed justifiable, scientific, and in accordance with both best practice and the appropriate code of conduct. The process of determining the factors which guide and influence PJDM and therefore the subsequent actions and refinements are complex, multi-faceted, and certainly not generic across practitioners. As such, the following section introduces a concept imported from counselling psychology that will help to navigate through this complex subject matter.

3.3 The Role of “Intention for Impact” in Applied Sport Psychology Practice

It has previously been reported that assessment of needs in applied sport psychology support provision often leads directly on to the intervention and that the mediating phase of issue conceptualisation (the essential bridge from one to the other) may have been neglected (Poczwardowski et al. 1998). In counselling psychology this mediating phase has been referred to as the configuration of the client’s problem (Cormier & Cormier, 1991) and as the point at which the practitioner’s “intention for impact” is developed (Hill, 1992).

Intentions represent the rationale for selecting a specific behaviour, response mode, technique, or intervention to use with a client at a given moment and the “intention for impact” is regarded as the primary step in the design and application of an effective intervention (Hill & O’Grady, 1995). Increasingly professions are recognising the significance of their practitioners’ PJDM and are investing in researching these processes accordingly (e.g., medicine; Patel & Ramoni, 1997, nursing; Husted & Husted, 1995, and teaching; Griffey & Housener, 1991).

Other disciplines within the sporting arena are also currently investigating the structure of decision making processes undertaken by their practitioners (e.g., elite coach decision making; Abraham et al., 2004 and referee decision making; Mascarenhas et al., 2005). Accordingly, it is proposed that PJDM research and consideration of how practitioners form intentions for impact would meet the demand suggested by Poczwadowski et al. (1998) for more attention to the ways in which applied sport psychologists conceptualise issues.

The chain of decisions taken by the applied sport psychologist regarding such primary concerns as the professional philosophy and theoretical orientation adopted, along with the practitioner's knowledge base, past experience and expertise and personal characteristics, are all likely to inform the intention for impact created. In applied sport psychology this intention represents not only what the practitioner envisages the eventual outcome of the intervention to be, but also the way in which they intend to relate to the client throughout the process (i.e., the nature of the goal and the nature of the relationship established). It represents an extremely important concept for applied sport psychology but one that has been previously unexplored.

It is the decisions made during the process of issue conceptualisation and then intervention design and refinement that ultimately determines the appropriateness, creativity, and overall quality of the intervention. Consequently, the exposure of the PJDM steps taken at this time (e.g., the significance of factors considered and the reasoning behind selected courses of action) is essential for understanding how interventions are constructed and subsequently, to judging the efficacy or efficiency of this process. For example, in order for inexperienced consultants to learn how to construct effective applied sport psychology interventions, exposure to the necessary

PJDM processes and the underpinning procedural and declarative knowledge is essential. In light of this, some initial implications that research into intention for impact may bring in three areas of applied sport psychology are now offered: namely, evaluation, reflective practice, and professional development and training.

3.3.1 Implications for Evaluation – What Are We Evaluating?

One of the many implications that emerge from enquiry into intention for impact is for the evaluation of applied sport psychology practice. As previously highlighted in Chapter 2, the different theoretical orientations from which practitioners may work advocate very different approaches in both the process and the relationships established and, as such, the succession of decisions made will vary greatly between practitioners. This has particular implications for the use of generic evaluation instruments, such as the Consultant Evaluation Form (CEF) (Partington & Orlick, 1987) and the Assessment of Consultant Effectiveness (ACE) instrument (Anderson, 2002) which, although recording some pertinent information regarding the support received, are unable to identify whether the particular constructs recorded are indeed appropriate for the specific theoretical orientation (or variation thereof) and subsequent actions and interventions taken in line with this. In short, they do not consider practitioners' intentions for impact and how these may have directed and influenced practice.

As discussed in the previous chapter, these instruments are heavily weighted toward assessing the characteristics displayed by the practitioner and whether these were considered favourable by the client in the short term. However, the time scale to which the practitioner is operating has implications not only for the practitioner's

intentions and subsequent characteristics displayed, but also for the time scales over which an impact is intended to be made (i.e., over the period of a session, intervention or entire program of support).

It is acknowledged that practitioners' intentions for impact are only one part of a complex intervention process that includes pre-existing and contextual variables, client reactions and behaviours, as well as practitioner responses and actions (Hill, 1992). However, given the pivotal role that intentions for impact can play in the quality and outcome of the intervention, it would seem both essential and insightful to assess them and the crucial PJDM processes that are undertaken in their development. Thus, the development of a range of evaluation procedures which incorporate intention for impact as a tool for gaining insight into issue and intervention conceptualisation is advocated and it is proposed that PJDM research could considerably aid their formulation (see section on Future Directions in PJDM Research).

3.3.2 Implications for Reflective Practice – What Are We Reflecting On?

A second implication is for reflective practice, which is suggested to be beneficial by assisting practitioners in making sense of their experiences, managing the self, and increasing personal and professional effectiveness (Anderson et al., 2004). As a process it is considered to be a crucial component of good practice, as illustrated by the inclusion of a reflective practice section within the BASES Supervised Experience and Accreditation criteria for sport and exercise psychologists (BASES, 2002) and the new BPS QSEP Stage 2 Portfolio of Competence (BPS, 2010). However, reflective practice only represents part of the picture. By its very

nature it is a reactive (reflective) process, focusing on understanding what has happened for the purpose of refining future practice. As the previous chapter explored, despite its usefulness as a tool, there is still further need for clarification as to what we should actually be reflecting on (i.e., the content/target of reflection rather than the process alone) and crucially, the criteria against which we are to reflect. In this regard, other professions, for example, medicine, nursing and teaching, have considered the veracity and accuracy of decisions taken, the proficiency of delivery, and the impact on the client in their reflective practice (e.g., Patel & Ramoni, 1997; Husted & Husted, 1995; Griffey & Housner, 1991, Mallinckrodt, 1994).

The proficiency of service delivery has received considerable attention in applied sport psychology as methods for teaching skills and strategies have been increasingly developed as part of the emphasis on “doing sport psychology” (Anderson, 2000). Although there is some documentation of in-situ decisions made by applied sport psychologists (e.g., Anderson, 2000), these texts are few and offer a predominantly descriptive account rather than exploring and explaining how the decisions have been reached. Even less attention has been given to addressing the veracity and accuracy of decisions taken by applied sport psychologists.

It is proposed that applied sport psychologists’ PJDM processes and the formation of their intentions for impact are proactive processes (taking place before, and refined during the event) and that research in this area would aid reflective practice by providing content (and criteria) on which to reflect. Thus, in effect, PJDM has the capability to represent the other part of the picture, which reflective practice is currently unable to capture.

PJDM research in applied sport psychology would allow the intention for impact formed to be considered along side the actual resulting impact of the intervention (as rated by both client and practitioner). This would provide valuable information and data on which to base the process of reflection and would move our assessment and evaluation processes on considerably.

3.3.3 Implications for Professional Development and Training – What Are We Training?

A third implication is for the professional development and training of applied sport psychologists. Professional bodies in applied sport psychology are concerned with setting, maintaining, and enhancing the professional and ethical standards of its members. More specifically, the systems of accreditation serve as a quality assurance mechanism and helps to ensure that the level of service received by a client is based on the best available knowledge and practice (e.g., BASES, 2004) and meets the occupational standards for professional practice competence (e.g., Eubank & Cain, 2009; BPS, 2010). The current trend in professional development to adopt ‘competence’ models while easier to implement than ‘performance’ models inherently places the emphasis on competent practice rather than movement towards a new level of performance or the development of expertise in the application of sport psychology (Nasseh, 2004).

It is accepted that knowledge base alone does not determine expertise, but rather the ability to utilise and deploy that knowledge in practice in the most effective manner (Kreber, 2002). As such, expertise in the application of sport psychology is manifested not just in scientific knowledge base but in the

practitioner's selection of the intervention, their declarative creativity in the design of the intervention, and their technical proficiency in the application of the intervention. The concept of knowledge-in-action (Schon, 1987) has been demonstrated to be useful for investigating the nature of knowledge in professional practice (Anderson et al., 2004). However, it is gaining an understanding of how this knowledge underpins subsequent judgments, decisions, and actions which has the greatest potential to offer significant insight into the construction of expertise in applied sport psychology. If the PJDM processes undertaken by the practitioner and the intentions for impact formed have such a significant role in determining the nature and quality of the interventions designed, then it is essential to develop this expertise in our profession specific training.

Expertise in domain-specific knowledge is considered to be a fluid configuration of knowledge, information, and situated experience, all of which are apt to change in response to questions arising in highly specific and localised contexts (Nowotny, 2000). Understanding the nature, construction, and development of domain-specific expertise is increasing at a rapid rate and holds direct implications for the training of PJDM in applied sport psychology. For example, it has been suggested that expertise is most likely to be needed in domains where “correct” answers do not exist (Hoffrage & Gigerenzer, 1998; Shanteau, 1995).

Operationalising these ideas, research in the development of PJDM expertise in other fields has uncovered categories of expertise (e.g., judgment, prediction, instruction, and performance), conditions and criteria for expertise (e.g., internal consistency and consensus; Einhorn, 1972, 1974), and differences in problem solving between practitioners with differing levels of expertise (e.g., the application of

cognitive rules and working forwards from information to decision versus working back; Patel & Ramoni, 1997). These are some examples of concepts which are likely to be useful for the understanding and developing PJDM expertise in applied sport psychologists. See Chapters 7 and 9 for further exploration of these ideas.

PJDM processes and the formation of intentions for impact thus represent a significant proportion of a practitioner's expertise. It is therefore essential for understanding the nature, development and construction of applied sport psychology expertise that these PJDM processes be incorporated into the training of practitioners.

3.3.4 Summary of the Role of Intention for Impact and PJDM in Applied Sport Psychology

There are numerous implications and benefits to researching intention for impact and broader PJDM processes, only some of which have been outlined in this chapter. It is not the intention to be exhaustive, but merely to offer some initial implications which research in this area may bring to stimulate thought, debate, and further research. A summary of the implications discussed is provided below.

Firstly, PJDM research is likely to enhance our evaluation procedures by providing a basis for evaluating actual impact along side intention for impact, thereby catering for the many different theoretical orientations adopted by practitioners. Secondly, PJDM research would complement current reflective practice procedures by offering further content, constructs, and criteria on which to reflect and by providing the proactive part of the picture from which to understand and refine our practice. Thirdly, PJDM research carries the potential to influence the

training procedures of novice practitioners in the traditionally difficult area of practical and professional decision making, and thus may help to bridge the procedural-declarative knowledge gap currently exposed through the under emphasis on issue and intervention conceptualisation (Poczwadowski et al., 1998).

Further understanding of issue and intervention conceptualisation through investigating practitioners' intentions for impact and PJDM processes offers an exciting opportunity for applied sport psychology research and practice. Outcomes from this line of enquiry, used in conjunction with client perceptions of impact, would give us a valuable insight into which constructs impact on successful intervention outcome and in what ways.

In addition, PJDM research offers the opportunity for the development of innovative and creative methodologies (advocated by Streat, 1998; and Streat & Roberts, 1992) adapted from clinical and counselling psychology research and practice for use in investigating PJDM and subsequently for use in monitoring and training PJDM expertise in applied sport psychologists.

3.4 Future Directions in PJDM Research

This focused study, along with the critical review of literature, has hopefully provided a sound basis for researching PJDM. This rationale includes the importance of PJDM recognised in other parallel fields and professions, the identification of gaps in current applied sport psychology practice, and the implications for evaluation, reflective practice and training of practitioners. Whilst the importance of PJDM has been established at a theoretical or conceptual level, there is a clear need for empirical data to support these contentions and to provide a further level of insight.

As such, the thesis considers the process/chain of decision making in which practitioners may engage to form (and revise) their intentions for impact. In addition, practitioners' and clients' perceptions of what was found to impact upon performance throughout the support are also of considerable interest. In essence, research of this nature is a vehicle for passing on expertise in applied sport psychology. PJDM research could ensure that expertise in the application of applied sport psychology is not lost, but available for novice practitioners to utilise as they develop their own skills, experiences, and expertise in the field.

Beyond this thesis, research and discussion of PJDM represents an opportunity and a forum for applied sport psychologists to clarify their therapeutic and conceptual frameworks for practice; a process which has, thus far, evolved in a somewhat unstructured manner. This would allow research to be conducted within identified groups for specific purposes, for example, training, practice communities, and peer supervision and review.

Perhaps of as much interest is the opportunity for advancing methods of empirical research that investigation of this nature is likely to provide. "Thinking-aloud", field studies of real-world problems and "expert systems" (e.g., Simon, 1986; Cooksey, 2000; Funke, 2001) are paradigms already established for researching decision making in parallel disciplines which offer exciting possibilities for developing research, learning, and regulation tools for use in applied sport psychology. Additionally, as judgment and decision analysis is increasingly becoming sought-after, so tools and creative ways to capture the complex cognitive processes are being increasingly developed (e.g., cause mapping, image theory, and neural network simulation, Cooksey, 2000).

There are a number of methodological and professional/ethical issues surrounding PJDM research, not least the recording and analysis of 'live' sessions. Fortunately, psychotherapy and counselling psychology researchers have been attempting to investigate the conceptually difficult areas of session impact and assessment of behaviour change since the early 1940's (Hill, 1992) and considerable progress has been made in addressing these issues. In particular, an increasing body of literature known as *Change Process Research* which aims to identify, describe, explain, and predict the effects of processes that bring about change over a course of therapy (Greenberg, 1986) and methods such as the *Process Analytic Approach*, which involves the study of in-situation performance (Greenberg, 1991) have been derived to aid this pursuit. These methodologies offer a further platform and provide some exciting possibilities for the advancement of PJDM research in applied sport psychology, some of which are considered in the next chapter.

Chapter 4. Research Methodology:
Issues Surrounding the Approaches Used

4.1 Introduction

The previous chapters have introduced some of the potential issues and challenges in researching PJDM and provided a critical analysis of some of the methods used in existing literature. Building from this base, the aim of this next chapter was to provide the contextual and philosophical backdrop and justify the rationale for the paradigm, strategies of inquiry, and methods selected for use in this thesis.

In their key paper on “future directions in applied sport psychology research,” Strean and Roberts (1992) suggested that the success of much applied research is contingent upon utilising intact groups, employing quasi-experimental designs, and accessing the experiences of athletes in ecologically valid manners. The authors state that the case-study procedure of assessing our interventions in sport psychology is both under used and entirely relevant. Furthermore, they challenge practitioners to use divergent methods and to realise the potential of less conventional methods. They also recommend that applied sport psychology research should consider more analysis of person-by-treatment interactions, which may be particularly crucial to our understanding of the efficacy of our interventions. Finally, it is highlighted that all information needs to be processed and acted upon within a dynamic, interpersonal relationship of consultant and athlete.

These suggestions have significantly influenced the selection of methods for use in this thesis. In the pursuit of empirical data, long-term, narrative case studies of

practitioner-athlete dyads have been utilised in Chapters 5 and 6 to explore person-by-treatment interactions as proposed by Strean and Roberts (1992). In addition, the relationship between consultant and athlete has been a strong feature of the data collection and interpretation in these chapters. An in-depth case study of one particular athlete is presented in Chapter 8 in an attempt to capture and understand the efficacy of intervention. The final data collection in Chapter 9 utilised case studies in a different form as a means of providing participants with vignettes from which to elaborate on and develop their judgment and decision making processes.

The methods employed in this thesis were pre-dominantly qualitative in nature (there was some quantitative assessment data in the final study). These qualitative data have been deliberately sought in an attempt to “illuminate the previously unknown or tenuously known, provide familiarity through rich description, and explore faulty understandings” (Strean, 1998; p. 334). Rich description was considered to be most meaningful for exploring the complexity, uncertainty, instability, uniqueness, and value conflicts which Schön (1991) describes as central to the world of professional practice. In doing so, ensuring the “goodness” of the qualitative research was of prime importance throughout the design, collection, and interpretation of data. In particular, Peshkin’s (1993) four categories for establishing “goodness” (description, interpretation, verification, and evaluation) have been central features of this consideration.

Strean (1998) proposed that the success of qualitative papers depends heavily on “researchers’ abilities to provide deep, dense, detailed accounts so that readers are allowed to experience vicariously the essential features of events that have been described and are being interpreted” (p. 335). As such, the reporting of data collected

by interview in this thesis (Chapters 5 & 6) was supported by numerous quotes to provide these deep, dense, and detailed accounts of participants' experiences. In particular, the interviews were used to help us understand the psychological process by which events and actions occur. Strean (1998) suggests that qualitative methods allow us to characterise the processes that experts use in their performances, so that we can gain a deeper understanding and description of complex interactions. As such, the reflections of a highly experienced practitioner were explored in Chapter 5. In addition, Strean (1998) proposes a move "beyond the single interview to get thorough, rich accounts of excellent performers' experiences" (p.337) and the use of multiple practitioner-athlete dyad interviews in Chapters 5 and 6 complemented this suggestion.

While interpretation and verification are considered key for clarifying complexity and adding layers of meaning to the analysis, evaluation is considered by Strean (1998) as among the most pressing needs in applied sport psychology and one essential to the growth of the field. Strean suggests that, consistent with the epistemological stance, the goal of evaluation is not to see if interventions are positively working, but to provide compelling support. He suggests that discovering and reporting performers' beliefs regarding the efficacy of interventions (with respect to who, what, where, when, and how) is important. This is a central focus of this thesis and is particularly apparent in Chapters 6 and 8.

As well as establishing 'why' qualitative research in particular has been utilised, it is of the utmost importance to consider the validity of such qualitative enquiry and Sparkes (1998) has addressed this 'problem of criteria' and the implications for sport psychology in detail. In particular, the trustworthiness criteria

and the techniques suggested for achieving them have been considered and utilised throughout the data collection, analysis, and interpretation in this thesis (see Chapters 5 & 6).

Trustworthiness is conceived as parallel to the empiricist concepts of internal and external validity, reliability, and objectivity (Manning, 1997). Furthermore, Sparkes (1998) highlights that researchers must make a range of strategic choices about which trustworthiness criteria will be emphasised or attainable within a study. As such, studies throughout this thesis will make reference to the credibility (paralleling internal validity), transferability (paralleling external validity), dependability (paralleling reliability), and confirmability (paralleling objectivity) of data. In particular, the techniques employed for achieving these criteria are discussed throughout.

The British Psychological Society's "Criteria for Evaluating Papers Using Qualitative Methods" (BPS, 2006) have been used as an additional source of criteria to ensure the quality of qualitative research methods. These criteria provide guidelines for general features (e.g., epistemological integrity), outline of methods (e.g., choice of data collection techniques), data analysis (e.g., auditability of analysis procedures and processes), and findings and discussion (e.g., researcher reflexivity).

Denzin and Lincoln (1994) highlighted that multiple theoretical paradigms claim the use of qualitative research methods and strategies and that, as a result, qualitative research can involve multiple methodologies and research practices. An ongoing debate surrounds the nature and consequences of these differences for the process and products of qualitative research. As such, it is important to clarify how we conceptualise the research process and product, how we view ourselves as

researchers, and how we understand the world around us. The following section explores where the philosophy employed in this thesis lies in the “landscape of qualitative research”.

4.2 ‘Constructing’ the Landscape of Qualitative Research

Denzin and Lincoln (1998) propose that the choice of research practices depends upon “the questions that are asked and the questions depend on their context, what is available in the context, and what the researcher can do in that setting” (p.4). As such, an interpretative paradigm should be selected to represent the overarching philosophical system of a particular ontology, epistemology, and methodology. As paradigms can not be easily moved between (for they represent belief systems that attach the user to a particular world view) then careful consideration is required to arrive at the chosen philosophical stance. Perspectives, in contrast, are less well developed systems and Denzin and Lincoln (1998) suggest these can be more easily moved between. As such, the qualitative researcher works between and within competing and overlapping perspectives and paradigms.

Guba (1990) describes a paradigm or interpretive framework as “a basic set of beliefs that guides action” (p.17). The paradigm describes the researcher’s beliefs about the nature of reality (ontology), beliefs about the relationship between the inquirer and the known (epistemology), and beliefs about how the inquirer should go about obtaining knowledge (methodology). As such, an interpretive paradigm makes particular demands on the researcher, including the questions asked and the interpretation brought to them.

The four major paradigms as proposed by Denzin and Lincoln (1998) are Positivist and Postpositivist, Constructivist or Interpretative, Critical (Marxist), and Feminist or Poststructural. They suggest that the differences between paradigms have significant and important implications at the practical, everyday, empirical level. For example, while the positivist/postpositivist paradigm may use a logical-deductive approach to form a scientific report; the constructivist paradigm may use grounded theory to offer interpretation via a case study or ethnography.

In selecting the paradigm for use in this thesis, critiques of positivism and postpositivism were considered. Denzin and Lincoln (1998) propose internal (intraparadigm) critiques (e.g., context stripping, exclusion of meaning and purpose, the inapplicability of general data to individual cases, and exclusion of the discovery dimension in inquiry) and external (extraparadigm) critiques (e.g., the theory-ladenness of facts, the undetermination of theory or the problem of induction, the value-ladenness of facts, and the interactive nature of the inquirer-inquired into dyad). These critiques considered alongside the philosophies of competing paradigms in qualitative research led to the adoption of a constructivist approach in this thesis.

Constructivism is oriented to the production of reconstructed understandings; perspectives are distinguished more by commitment to questions of knowing and being than by specific methodologies, which enact an emic (local), ideographic (case-based) approach to inquiry (Denzin & Lincoln, 1998). In terms of ontology, constructivism adopts a relativist approach (i.e., there are multiple realities). This suggests that knowledge, truth, and morality exist in relation to culture, society, or historical context and consequently, are not absolute. As such, constructions are not

more or less “true”, in any absolute sense, but simply more or less informed and/or sophisticated. The epistemology of constructivism is transactional and subjectivist (i.e., the knower and subject create understandings) as such, the findings are literally created as the investigation proceeds and the conventional distinction between ontology and epistemology disappears. The constructivist methodology is naturalistic (in the natural world), hermeneutical (concerning interpretation), and dialectical (relating to the logical discussion of ideas and opinions). As such, the suggestion that individual constructions can be elicited and refined only through interaction between and among investigator and respondents fits well with the aim of this thesis to use practitioner and athlete reflections (Denzin & Lincoln, 1998).

Furthermore, constructivism aims to understand and reconstruct a consensus but is still open to new interpretations as information and sophistication improve. As such, ‘knowledge’ consists of those constructions about which there is relative consensus, but multiple “knowledges” can co-exist and these constructions are subject to continuous revision. Knowledge can accumulate in a relative sense through the formation of ever more informed and sophisticated constructions and transfer of knowledge occurs through the mechanism of vicarious experience provided by case studies (Denzin & Lincoln, 1998). Again, the aims of constructivism work well with the aim of this thesis to develop more sophisticated constructions of knowledge and informed development of PJDM.

In addition to the trustworthiness criteria previously mentioned, criteria of authenticity are deemed appropriate for judging the quality of inquiry, for example, ontological authenticity (enlarges personal constructions), educational authenticity (leads to improved understanding of the constructions), catalytic authenticity

(stimulates to action), and tactical authenticity (empowers action). Denzin and Lincoln (1998) suggest that ‘values’ hold pride of place in constructivist inquiry as they are inescapable in shaping and creating outcomes. As such, ethics are intrinsic to this paradigm; there is an incentive for revelation as hiding the inquirers intent is destructive to the aim of uncovering and improving constructions.

Denzin and Lincoln propose that “paradigm issues are crucial; no enquirer, we maintain, ought to go about the business of inquiry without being clear about just what paradigm informs and guides his or her approach.” (p. 218). As such, having outlined why a constructivist paradigm was selected, the following section discusses how this choice has influenced, informed, and guided the research design employed in this thesis.

4.3 Research Design and Strategies of Inquiry

Denzin and Lincoln (1998) outline five phases of the qualitative research process: Phase 1 – The Researcher; Phase 2 – Interpretive Theoretical Paradigms and Perspectives; Phase 3 – Research Design: Strategies of Inquiry; Phase 4 – Methods of Collection and Analysis; and Phase 5 – The Art of Interpretation and Presentation. As such, the remainder of this chapter concerns Phases 3 – 5.

The research design describes a flexible set of guidelines that connects theoretical paradigms to strategies of inquiry and methods for collecting empirical material (Denzin & Lincoln, 1998). Furthermore, a strategy of inquiry comprises skills, assumptions, and practices employed to move from paradigm to empirical world (i.e., to put the interpretive paradigm into motion).

This thesis has adopted a range of qualitative data collection methods including semi-structured dyad interviews, an in-depth case study, and the use of vignettes to assess PJDM. Each of these methods will be considered in turn to elaborate on how they connect the constructivist paradigm to the empirical data collected.

4.3.1 Practitioner and Athlete Reflections on Long-Term Support Programmes

The first set of empirical data was gathered using semi-structured interviews with a sport psychologist and four athletes who had received support (Chapter 5 & 6). Semi-structured interviews were utilised as a means of inquiring into selected issues in great depth. As is typical of qualitative inquiry focusing on depth, relatively small sample sizes were selected ‘purposefully’ (see Chapter 5 section 5.2 for an exploration of participant selection). This intended focus in qualitative sampling is considered to be a strength; the logic and power of which lies in selecting information-rich cases for study in depth (Patton, 2002). Such information-rich cases yield in-depth insights and understanding rather than empirical generalisations, which supports Greenberg’s (1986) claim that we may not always be looking for generalisation.

A semi-structured interview technique was selected on the basis that it could allow the participant to paint a detailed picture of their beliefs, perceptions, and accounts while providing the interviewer with the flexibility to follow emerging avenues (Smith, 1995). As such, the data collected represents a manifestation of their ‘psychological reality’ which complements the constructivist approach to ontology.

Semi-structured interviews are particularly suitable for exploring complexity or process and this was the primary aim of the initial data collection. This is reflective of a “process analytic” approach which attempts to analyse the complex unfolding of moment by moment performance of people in specific states and contexts (Greenberg, 1986). An emerging methodological perspective on accessing expert cognition is applied cognitive task analysis (ACTA) for which in-depth interviews is suggested as a knowledge-elicitation technique (e.g., Gore & McAndrew, 2009; see Chapters 5 & 10 for more details).

For the interviews conducted in Chapters 5 and 6 a schedule was devised to act as a guide including questions, prompts or probes, and a rationale for the question based on the research objective and related literature (see appendices E & F). Questions were constructed to avoid leading participants, allow for freedom of speech, create the opportunity for depth and flow (e.g., by using open questioning), and to avoid unnecessary jargon. As such, the types of questions and the phrasing or wording of these was subject to close scrutiny and pilot testing to ensure they were easily understood and asked in the most logical order.

I was well versed on interview techniques having previously conducted numerous semi-structured interviews of this nature. As such, I was able to take practical steps to maximise the opportunity for the participant to “tell their story” (e.g., by facilitating rapport and empathy, allowing the respondent to influence the direction and introduce new ideas, treating the respondent as the expert on the subject, utilising encouraging non-verbal behaviour and voice messages, and summarising the interviewee’s account).

The methodology which ‘subsumes’ semi-structured interviews in the constructivist paradigm is grounded theory. Grounded theory is a methodology that seeks to ‘construct’ theory about issues of importance in peoples’ lives and has been described as the most influential paradigm for qualitative research in the social sciences today (Strauss & Corbin, 1998). Grounded theory is inductive in nature, thus the researcher does not enter with pre-conceived ideas that they are trying to prove or disprove. Rather, constant comparison of emerging ideas to the raw data grounds the researcher’s theories in the participant’s experiences, thus supporting the relativist ontological position of constructivism (Mills, Bonner, and Francis, 2006). Detail of how this methodology influenced the data analysis, interpretation, and presentation is provided in section 4.4.

4.3.2 Reflection-in-Action: A Case Study

Chapter 8 details an in-depth case study with one athlete and exemplifies a practitioner employing the principles of PJDM at a local level (e.g., it represents a single case which is not designed to be compared with other individuals). As such, this method of ‘self-study’ data collection may be best categorised as ‘action learning’ or ‘action research’ in which a case study is typically used to reflect on what the researcher is doing or to understand it in new ways (Patton, 2002).

As Patton (2002) describes, the distinction between research and action is quite blurred and the research methods tend to be less systematic, more informal, and quite specific to the problem or person for which the research is undertaken. Data collection methods used in Chapter 8 included a thought log/diary, one-to-one semi-structured consultations, meetings with other service providers and significant others,

and observation. Furthermore, in action research the researcher is often directly involved in gathering the information and then studying them self. This approach certainly complements the emphasis on Schön's (1991) concept "reflection-in-action" that is adopted throughout Chapter 8 and supports the intention to implement a narrow focus of study at this stage in the thesis.

4.3.3 Training PJDM Expertise in Novice Practitioners

In the final data collection (Chapter 9), an 'evaluation research' design was employed (e.g., participants are evaluated on pre and post-intervention performance of a 'case-formulation' task). Patton (2002) suggests that summative evaluations serve the purpose of rendering an overall judgment about the effectiveness of a programme or intervention. As is consistent with research of this nature, the data consist of both qualitative and quantitative elements. The qualitative data comprise written elaboration of case study 'vignettes' and related 'concept maps', which are considered to add depth and detail to the quantitative findings. The assessment of case formulation criteria was represented numerically by likert scale ratings and thus comprises the quantitative element.

This 'mixed-method' approach to applied research offers triangulation of data and is embraced by the pragmatic research philosophy, which argues that a continuum exists between the objective and subjective viewpoints of positivists and constructivists (Giacobbi, Poczwardowski, & Hagger, 2005).

4.4 Data Analysis, Interpretation, and Presentation

As Patton (2002) describes:

“The challenge of qualitative analysis lies in making sense of massive amounts of data. This involves reducing the volume of raw information, sifting trivia from significance, identifying significant patterns, and constructing a framework for communicating the essence of what the data reveal” (p. 432).

Accordingly, the data in Chapters 5 and 6 were collected via semi-structured interviews using a grounded theory methodology and analysed using a “bottom-up” coding system (Auerbach & Silverstein, 2003). This coding system not only complemented the inductive nature of grounded theory (building from raw text to theoretical constructs), but was also explicitly linked to the qualitative data analysis software program NVIVO, which was used to organise the vast amount of data.

The figure below illustrates how the coding system described by Auerbach and Silverstein (2003) was “mapped onto” the NVIVO software program for data analysis. The two-way arrow represents the constant comparison process, which is such a strong and central feature of grounded theory.

Coding Basics

Research Concerns

Theoretical Narrative

Theoretical Constructs

Themes

Repeating Ideas

Relevant Text

Raw Text

NVIVO Basics

Tree Node Level 3

Tree Node Level 2

Tree Node Level 1

Free Nodes



Figure 4.1. Coding basics and corresponding NVIVO basics as described by Auerbach and Silverstein (2003).

The actual mechanics of coding in NVIVO involved three phases: making the text manageable, hearing what was said, and developing theory. These phases are described in depth by Auerbach and Silverstein (2003), but for brevity and ease of understanding are summarised in the table below:

Phase 1: Making the Text Manageable

1. Explicitly state your research concern and theoretical/conceptual framework.
 - Enter thoughts in research journal.
2. Select the relevant text for further analysis.
 - Code relevant text in a free node. As you code, record thoughts about where your data are going in your project journal.

Phase 2: Hearing What Was Said

3. Record repeating ideas by grouping together related passages of relevant text.
 - Combine related passages of relevant text located at different free nodes into a single tree node that codes the repeating idea.
4. Organise themes by grouping repeating ideas into coherent categories.
 - Create tree nodes for each theme; these will be parent nodes to the repeating ideas that define the theme.

Phase 3: Developing Theory

5. Develop theoretical constructs by grouping themes into units consistent with your theoretical framework.
 - Create tree nodes to correspond to theoretical constructs.
6. Create a theoretical narrative by re-telling the participants a story in terms of the theoretical constructs.

Table 4.1. The mechanics of coding in NVIVO as described by Auerbach and Silverstein (2003).

Whilst NVIVO offered a systematic way of storing and organising vast amounts of data, it did not (as I had hoped) analyse the data for me! As such, the use of NVIVO could best be described as categorisation of the data. The analysis and identification of themes was ultimately a pen and paper exercise involving coding the raw text, developing concept maps of related ideas and building these into summaries of themes. Thus, use of a software package was beneficial from an organisational and information management point of view, but was limited in terms of scope to meaningfully analyse the results.

The data in Chapter 8 were collected via a thought log/diary, one-to-one semi-structured consultations, meetings with other service providers and significant others, observation, and reflection-in-action. An ‘action research’ methodology was utilised and the data presented by way of a case study. As Patton (2002) suggests, in action research “the process is the product” (p. 436); thus, a case study allows for thick description while providing a specific way of organising and analysing the data.

The diverse and varied sources made up the raw data for case analysis and amounted to a large accumulation of information and material. A case study was then constructed using the three-step process described by Patton (2002) which included, assembling the raw case data, constructing a case record, and writing the final case study narrative. As such, the final narrative made accessible all the information to understand the case in its uniqueness and was presented both chronologically and thematically.

Patton (2002) suggests that case studies may be layered or nested, so even with a single case ($N = 1$) you can also study the overall programme if you have programme-level data. The presentation of data in Chapter 8 has been significantly influenced by this suggestion and is reported using multiple layers including programme-level, intervention-level, and session-level analysis.

The data in Chapter 9 were collected via written elaboration of case study ‘vignettes’ and related ‘concept maps’ using a ‘summative evaluation’ research design. The response data were analysed using a combination of qualitative and quantitative data interpretation techniques. As a difference was sought between pre and post training, qualitative data were given a corresponding likert scale evaluation (to represent the quality of response) for the purpose of comparison using inferential statistics.

4.5 Ethical Considerations and Principles of Good Practice

Throughout the design, conduct and reporting of the research in this thesis the University’s *Code of Good Practice in Research* (2002) was adhered to alongside the BPS *Code of Ethics and Conduct* (2009) and the BASES *Code of Conduct* (2009).

The research proceeded with institutional ethical approval and was not deemed to require any further level of ethical approval.

In terms of managing good research practice, the professional standards of honesty, openness, accountability and conflict of interest were upheld (*Code of Good Practice in Research*, 2002). In addition, a high level of attention was paid to record keeping and storing primary data securely.

The four ethical principles which constitute the BPS *Code of Ethics and Conduct* (2009) were maintained throughout: respect, competence, responsibility, and integrity. In particular, an information sheet was provided to all participants explaining confidentiality and the right to withdraw from the study at any time without prejudice. Informed consent was obtained from all participants who took part in this research.

As I hold Chartered status with the BPS Division of Sport and Exercise Psychology, I am professionally bound to adhere to the BPS *Code of Ethics and Conduct* (2009) and the BPS *Professional Practice Guidelines* (2008). Similarly, accreditation as a sport and exercise scientist with BASES calls for adherence to the BASES *Code of Conduct* (2009). The consideration of these professional practice guidelines was especially important given that the study reported in Chapter 8 involved providing applied sport psychology support to a high-performance athlete.

4.6 Research Methodology: A Summary

A range of qualitative methods were utilised throughout the thesis. Chapters 5 and 6 used grounded theory to interpret data from semi-structured interviews via a bottom-up coding system. This analysis was designed to provide rich description and

depth of understanding of person-by treatment interactions. The intention here was to illuminate the complexity PJDM in of applied sport psychology practice and to capture and describe central themes across the varying circumstances of effective long term support to four individual clients.

Chapter 8 used action research to interpret data collected from a range of sources by way of a case study with one particular athlete. This analysis was designed to provide thick description and organisation of data chronologically and thematically. The intention here was to put the general themes generated in Chapters 5 and 6 into practice with an individual client. Therefore, a narrow focus was sought at this stage of the thesis to encourage self study and reflection-in-action.

Finally, Chapter 9 used summative evaluation research to interpret data collected by case study vignettes and concept maps via combined qualitative and quantitative data interpretation techniques. This analysis was designed to evaluate participants' performance on a case formulation task and to show whether a scenario-based instructional approach aids the development of PJDM expertise. An overall judgment about the effectiveness of this education was sought here and, as such, this study had a much wider 'scope' than Chapter 5, 6 and 8 and included the use of a larger number of participants.

It is hoped that this range of methods from a broad, narrow, and then educational perspective will provide both the breadth and depth of insight into the complexity of PJDM in applied sport psychology practice and show how PJDM expertise could be developed.

Chapter 5. Practitioner Reflections on Long-Term Support Programmes

5.1 Introduction

To recap thus far, Chapters 2 – 4 have represented a “parameterisation” of the research area that this thesis is exploring. The critical review of literature reflected on current practice and, in particular, used evaluation as a “window” to consider effective practice. As such, reflection on decision making and issue conceptualisation were highlighted as areas for development together with the importance of the relationship between client and practitioner. Chapter 3 introduced and developed the central construct of PJDM, demonstrated that the role of practitioner decision making is considered to be valuable in parallel fields and professions, and thus could add value to applied sport psychology practice (e.g., through the role of intention for impact). Finally, methodological issues and approaches to studying these concepts were outlined in Chapter 4, as an explanation of the chosen research design and strategies of inquiry.

The next phase of the thesis involved an “examination” of the suggested issues and directions. Thus far, comment and suggestion have been made based on critical reviews of literature and practice; however, empirical data is required to support the contention that reflection on PJDM and on the client-practitioner relationship is both important and worthwhile. In order to do this comprehensively, it was imperative that both practitioner and clients’ perspectives on effective practice were considered in tandem. Within the wider context of the thesis, therefore, this phase of “examination” and data collection was undertaken to appreciate what can be

learnt from effective long-term consultancy and how this information could be used to enhance the performance of applied sport psychologists.

This study, linked in a two-part series with Chapter 6, investigated the nature and complexity of effective sport psychology support through the perspective of a highly experienced practitioner engaged in long-term support programmes with a number of individual, high-level sport performers. As such, the aim was to capture and describe central themes across the varying circumstances of effective long-term support to the four individual athletes. Of particular interest here were the practitioner's reflections on PJDM, the nature of long-term client-practitioner relationships, and how these factors may have impacted on the evolving support process. Importantly, the reasoning and justification behind such courses of action could provide insight into the scientific rationale, declarative knowledge and professional philosophy of the practitioner and illustrate the necessary coherence of applied decision-making processes (Poczworski et al., 1998; Ruiz-Primo, 2004).

Highly experienced providers of sport psychology services would appear to be a particularly rich source of information on this subject matter, as they are likely to have developed and refined their practice over numerous years (although it should be noted that mere time served, or even well considered experience does not necessarily produce expertise e.g., Phillips, Klein & Sieck, 2004). Indeed, Tod (2007) suggests that research directions in professional development should include following sport psychology consultants longitudinally and recording experienced practitioners' histories. As such, the investigation of highly experienced providers' reflections, taken across a longitudinal interaction with a client, is likely to offer further insight into the 'cognitive components' utilised by effective practitioners

especially if particular emphasis is placed on how professional judgments and decisions are formed.

This ‘long-termism’ also holds unique potential for knowledge. For example, the extent to which these judgments and decisions persist and impact over time and the extent to which associated characteristics may ebb and flow throughout the support (as phases within the relationship for example) has been unexplored in applied sport psychology research. Of particular interest is the exploration of applied consultants’ work with clients over extended periods of time (e.g., one Olympic cycle or more). Such ‘longitudinally-focussed’ research should provide insight into a range of factors including the practitioner’s issue conceptualisation considered against presenting and evolving needs, the complexity of decision making both within and between phases of support, and the goals and planning involved in the overall programme structure.

Coupled with this research initiative is an understanding that there has been very little previous reporting of long-term retrospective athlete–psychologist consultations from the provider’s perspective. Whilst we have seen reflections on long term squad based support (e.g., Bull, 1995; Hardy & Parfitt, 1994) this has not extended to the in-depth reporting of interventions and support carried out with individuals over a number of years; notably, the client’s perspective has also been underrepresented. The increased complexity inherent in longer term work thus makes this a good topic for examination if we want to explore PJDM in depth to obtain a “rich picture” of multifaceted support work.

Finally, the extent to which these effective provider characteristics and practices are addressed in current formal evaluation procedures (e.g., the Consultant

Evaluation Form; Partington & Orlick, 1988) poses an interesting question. As such, the purpose of this chapter was to investigate the nature and complexity of a highly experienced practitioner's PJDM during effective long-term sport psychology support to four individual athletes. Of particular interest here was the evolution of key variables in sport psychology practice (e.g., the nature of the goal and the nature of the relationship) and the extent to which the consultant's judgment and decision making regarding these variables contributed to and impacted on the success of the support.

In summary, it was anticipated that this study could illustrate the importance of PJDM in applied practice, provide insight into the nature and complexity of long-term sport psychology support, raise awareness of long-term athlete-psychologist relationships, clarify whether existing evaluation procedures are compatible with these exemplars of current practice, and highlight implications for professional practice, training and future research in this area.

Practitioner reflections on long-term support programmes (Chapter 5) are presented before the athlete reflections (Chapter 6) as the practitioner reflections offer a more direct insight into PJDM processes described above. The athlete reflections go on to offer insight on the extent to which the athletes were aware of these processes and what about the support they considered to be most effective or to create impact. A huge amount of data was generated through these interviews and although it was considered more meaningful to represent this as either 'practitioner' or 'athlete' reflections, Section 6.4.2 outlines some the similarities and differences between the practitioner and athlete perspectives as an attempt to 'interweave' the reflections of both parties.

5.2 Methodology

5.2.1 *Participant Descriptor*

The sole participant in this part of the data collection was an applied sport psychologist with over 25 years of experience across approximately 50 sports who had been in attendance at numerous high-level events including 4 Summer Olympic Games, 4 Winter Olympics, and over 30 World Championships. He was a University Professor and author of over 90 publications. As such, this participant was considered to be highly experienced in his field (i.e., he is BASES Accredited/High Performance accredited, BPS Chartered, and listed on the BPS register of expert witnesses). See the following section for more discussion of participant selection.

The psychologist was a trained counselling psychologist and practised using a Cognitive-Behavioural orientation and more specifically a Rational-Emotive Behavioural Therapy (REBT) perspective. REBT was founded in 1955 by Albert Ellis who proposed that clients have to think, feel and act against their upsetting or unhelpful thinking. In keeping with the REBT model of disputing beliefs, the practitioner would use elements of challenge with clients where appropriate in the process of establishing new and more effective outlooks. The practitioner also adopted a solution-focussed approach and brought a broad multi- and interdisciplinary perspective to his practice (e.g., he was also a BASES accredited interdisciplinary practitioner and a certified strength and conditioning coach).

The participant was asked to nominate four ‘diverse’ cases in which he had worked with an athlete for a minimum period of three years or one Olympic cycle (range 3 – 10 years). Each of these athletes could be considered as an elite or high performer and the nature of support was sufficiently extended to be classified as

long-term. The sample consisted of two male and two female performers, each from a different sport.

One practitioner reflecting on four individual cases was preferred over a study design to examine multiple psychologists with one case each. This limited the number of potential variables involved, allowed for comparison of similarities and differences in support to different athletes by the same practitioner, and allowed for an in-depth insight into the *modus operandi* of one highly experienced practitioner through a specific focus on his PJDM.

The participant understood the nature of the study and written informed consent was obtained prior to the interviews commencing.

5.2.2 Participant Selection: Pros and Cons

The practitioner selected for this study was also the supervisor of this thesis, a choice that requires some discussion to explore the issues surrounding this selection. In terms of justifying this selection, the descriptor above highlights the extent of this practitioner's experience. More specifically with regard to his 'effectiveness', the practitioner was oriented to enhance high-level performance and had been employed to offer his services over long-term periods to a number of third party organisations (e.g., National Governing Bodies and Institutes of Sport). As such, there was a strong case for consideration of this practitioner as both experienced and (at least as perceived by third parties) effective.

The practitioner was asked to provide cases that would provide exemplars of effective long-term practice (although the cases were considered to be representative of working practice rather than exceptional cases or outliers). In order to maximise

variation (heterogeneity), four different cases were considered; this strategy aimed to capture and describe central themes across the varying circumstances as suggested by Patton (2002).

The disadvantage of this choice of practitioner was that he was obviously aware of the philosophy and methods to be employed as part of this research. This delimitation is acknowledged; however, the disadvantages associated with this were not considered to outweigh the advantages of his inclusion (e.g., willingness for his clients to offer critical evaluation and his own level of critical reflection on his practice). Additionally, the ‘grounded’ nature of the research methodology employed in this study was considered able to counter some of the potential bias. Finally, this supervisor was initially ‘selected’ based on his position as an illuminative forward-thinking applied practitioner.

To demonstrate awareness of the ethical considerations here, the practitioner was aware that this discussion of his inclusion would effectively waive his right to confidentiality as a participant, at least to the examiners and readers of this thesis.

5.2.3 Interview Schedule Design and Pilot Study

A semi-structured interview schedule (see Appendix E) was constructed in line with recommendations suggested by Smith (1995). The issues and questions to be addressed in the interviews were selected on the basis that they were considered to be important or under-explored in the critical review of literature and practice. Consistent with the aims of the study, the primary areas for consideration were the nature of the goal (what the practitioner was attempting to achieve with the client) and the nature of the relationship (how did the practitioner interact with the client to

achieve the goal). In order to provide context and depth, the nature of support (what the practitioner did with the client) was considered as well as the nature of impact (how well it was considered to have worked). In addition, the nature of overall planning and impact (outside specific time-phases) and the nature of other factors and variables were considered to provide a fully comprehensive exploration.

Appropriate questions related to each area were devised to address the areas listed above and possible prompts and probes were developed to further enhance the interview schedule. Several drafts of the interview schedule were revised to ensure questions were not too general or too explicit and feedback sought from independent clinical/sport psychology practitioners. An initial pilot interview was conducted with an applied sport psychology practitioner who had been working with an athlete for over 4 years using the interview schedule to ensure the questions asked were appropriate. This pilot study led to the questions being revised for maximum coverage and understanding, while allowing me to further practice and refine previously honed interviewing skills.

5.2.4 Procedure

Four individual semi-structured interviews were carried out using the devised interview schedule with each interview lasting between 75 – 120 minutes. This meant that the participant was asked all of the questions on the schedule, though not necessarily in an identical order due to the manner in which the conversation evolved (Smith 1995). All interviews were conducted face to face in an environment that was comfortable and convenient for the participant.

The interview schedule was supplemented by a “time line” drawn by the participant that consisted of his perception of differing phases within the long-term support. These phases were determined by major competitive and life events or the chronological order of events. The timeline was used initially as a tool to jog the participant’s memory and then subsequently as an interview tool to guide questions regarding the support provided (i.e., questions regarding the nature of the goal, support, and impact, were asked for each phase identified). After all phases had been discussed, the participant was asked some general questions regarding the relationship, and the overall planning and impact of the support.

Interviews were recorded on a digital voice recorder and transcribed verbatim yielding 106 pages of single spaced text in total.

5.2.5 Qualitative Data Analysis

The transcribed interview data were imported into the qualitative software package QSR NVivo Version 2.0. A process of inductive coding was undertaken following guidelines provided by Auerbach and Silverstein (2003). This involved “making the text manageable” by identifying relevant text; and “hearing what was said” through recognising repeating ideas and organising themes. Finally, theory could be developed by grouping themes into theoretical constructs and creating a theoretical narrative to tell the participant’s stories. As such, the data analysis was embedded in grounded theory (Corbin & Holt, 2005). Constant checking and re-checking with the original raw data and an associated research journal was maintained throughout.

5.2.6 Establishing Trustworthiness

In order to establish validity, certain techniques for meeting the “trustworthiness criteria” suggested by Sparkes (1998) were employed. Prolonged engagement with the data and consensus validation was used to establish credibility. Consensus validation was established through measuring inter-rater reliability. This resulted in 88.75% of raw data quotes being placed in their higher order themes whilst 91.66% second order themes were placed into third order general dimensions. Those raw data and higher order themes which were disputed were subsequently discussed and an agreement reached about which category they were best represented by. Transferability was addressed using thick description and the provision of the full thematic diagrams to allow for reader judgment of potential transferability. The demonstration of credibility and overlap of methods help to justify dependability, and the internal auditing and constant comparison of the data employed in the thematic analysis assist with establishing confirmability. A reflective journal was also kept throughout the qualitative data analysis process to document difficulties, interpretations, and directions.

5.3 Results and Discussion

To recap, the aim of this study was to investigate the provider’s perspective of the complexity and nature of PJDM during effective long-term sport psychology support with four different athletes. The inductive analysis of data involved the creation of higher order themes which reflected the processes involved in long-term psychology support. These are presented below in what is approaching a chronological order to provide a logical context to the findings (i.e., beginning with

assessment, issue conceptualisation, and agenda/intentions formation, and progressing through to goals and planning, the support provided, the modus operandi, the relationship, and finally the impact, change and effectiveness). Of special interest were the practitioner's reflections on what in particular he considered effective for the client and how these factors may have changed, evolved and developed throughout the support.

The themes emerging from the inductive analysis of the data are presented below along with associated quotes to allow the reader to gain an appreciation of the context in which these themes were discussed by the participant. The full thematic display is then included as a figure at the end of each section to allow for a fuller appreciation of the content in each theme.

5.3.1 Nature of Assessment, Issue Conceptualisation, and Agenda/Intention Formation

Assessment of needs, challenges, potential and product loss

The provider described that he spent a lot of time with the performers in order to become very aware of the personal challenges they were facing, to assess their needs, and to learn about the sport and the characters within the environment. He described how he watched them living, interacting, and training and considered the symptoms and causes in order to develop an understanding of where the fragility lay while assessing potential and product losses:

...for me it's important you spend a lot of time with the athletes and I'm around these guys quite a bit now... I'm a feature at squad weekends and I'm spending a lot of time just talking to them about their life...

...so I'm very aware of the personal challenges they're facing and I'm hearing what they're saying to me...

At that time I'm just assessing needs, I'm trying to find out what's going on, I'm learning the sport so I know what someone in the sport should need. I'm learning the positions; I'm learning also the characters.

I went out and spent a few days with him out where they were staying, watched the way they lived, watched how they interacted, watched the training ... this, that and the other ... started to get into the guy.

I try and make the potential as big as possible. So I'm saying, what can I bring to this guy that will make him better able to perform? But also, what can I do for this guy that will make his product losses ... decrease? And both go on.

Theoretical orientation as the 'lens' through which to examine issues and drive practice

The provider placed considerable emphasis on the theoretical orientation utilised including the nature of the orientation (e.g., as driving everything you do), the rationale for choice of orientation (e.g., belief in the process, fitting with the provider's perceptions of what he's doing), and the orientation in practice (e.g., emphasis on emotion and empathy, and taking people where they otherwise couldn't go). The following quotes illustrate some of these points:

It drives everything you do, so I am solution focussed. I am looking to parameterise problems. I'm looking to delimit them to be able to know what I should and shouldn't be going at...

I don't treat that as a recipe... it's the lens through which I examine the problem... it's the lens through which I test and adjust the solutions.

It seems to me to be a much more scientifically based approach... there is a lot more cause and effect. I am by inclination a hard scientist. I like to use triangulation measures. I can see how the process works. I think secondly, it is much more realistic because generally in this environment, people are wanting ... not quick fixes ... but graphic solutions.

...this is far more about providing someone with something... for me, it's a privilege and therefore I want to bring something to the people. I want to do something for them, bring something to them, give them something, take them somewhere where they haven't been ...

I'm a leader, I train people, I take them places they can't ... they don't want to go, they don't think they can go ... that's what I do, that's my ... my whole *raison d'être*. So I need a ... I need a theoretical orientation that fits with what my perceptions of ... of what I'm doing are.

...a real emphasis on emotion and on the ... the good and the bad side of that emotion ... is something that's really useful.

Multilayered complex issue conceptualisation to develop a shared understanding and direction

The psychologist described a multi-layered complexity to issue conceptualisation which was used to build a picture of the clients needs and to develop a shared understanding, shared vocabulary and a common agreement on the direction of support as the following quotes illustrate:

...you automatically get layers of work... so there is performance, behaviours, perceptions, emotions.

...the complexity has been the three parts. It's been him as the athlete ... it's been his interactions and it's been ... him as a person.

...the complexity was layered ... was layers within layers, wheels within wheels.

I can go ... right ... let's present it like that, let's conceptualise a bit like that ... And I ... I tend to use that skill.

...then you then have to check your arithmetic and that's being able to turn round to someone and say, I'm doing this, what do you think ... How does that match, how does that fit? So talking through it with a peer supervisor ... Checking your arithmetic, checking your audit, using the client ... let's just run through this, just tell me if this makes sense ... and it's almost like you're asking him or her to step outside their own situation and reflect on what's going down ...

So you're constantly checking and rechecking with the client that the things that you're doing make sense to her schematic ... to her cognitive map of what's going on...

...if I can't conceptualise the problems ... if she and I can't come to a common agreement that these are the issues ... then we're stuffed...I've got to make sure that my understanding is hers...let's get some concepts we can use, let's get some labels we can use, so I can use her vocabulary. So I've

now got a picture of her space ... and now I can put her in her space and I can put the other chess pieces around her.

Formation of agenda for consistent and coherent practice

The psychologist suggested that support agendas were formed from the client (e.g., what she wanted to achieve), the National Governing Body (e.g., that's what they want her to achieve), the provider (e.g., we now need to build you up to make those changes part of your normal behaviour repertoire), and from theory (e.g., in that there has to be an exit phase). The following quotes demonstrate the process of implementing such agendas:

I now start to get sort of an agenda to say, right what are we gonna work on. And it's almost like you lay the base line and said well OK let's see what we should work on, let's identify exactly what I should work on because otherwise I'm just, I'm doing this, I'm doing this. Let's really try and get some consistent themes running here.

...there are levels of what I'm doing ... I'm rarely gonna do something for one reason. I'm much, much more often gonna do this and as a result of that, then this could have this and this and this and this. So it's very, very much nested, yeah ... nested loops, hierarchical ...

But it's a number of different things that I'm doing. Why am I doing that? Well, I'm asking them to check my understanding, I'm asking them to check that they agree with my rationale, we're making sure we've got the same concepts, they're actually feeling more in control than I am ... so there's a whole of raft of things come out from that one little procedure.

Formation of programme, intervention and session-level intentions

In addition, the content of the psychologist's agendas and intentions appear to operate on multiple levels (i.e., session, intervention, and programme based). So while some agendas are pursuing short-term aims (e.g., to get her to talk to me, to show that I understand, and to show that I can appreciate her situation) other are intended to impact on much longer-term over-riding aims (e.g., satisfaction,

achievement, prevention of slipping back, gaining more control, being happier, and preparing for transition) as the following quotes illustrate:

Increased control by her, increased sense of self worth because she was in better control, increased realism in where she was, tolerance of the fact that things wouldn't go necessarily in accordance to exactly how she would like them to be, prevention of her slipping back into the awfulising self destructive downwards cycle, development of the Bob the Builder mentality. Can we fix it, yes we can.

So for me to give her things that are pertinent, for me to show that I understand where she's coming from, that I can appreciate her situation I think is crucial. That's what I try and do.

What would you base that on? You'd base it on ... again, what are you trying to achieve? You know. If you're trying to achieve independence for someone, you can't make them independent by keeping phoning them and checking that they're there.

Complex planning of approach, delivery and refinement for maximum impact

The psychologist revealed a high level of complexity in the planning, of approach, delivery and refinement of practice. This included a layered approach in which sets of sessions were used as building blocks towards an identified target, accompanied by a checking and re-checking of progress and direction as the following quotes illustrate:

...there were layers of complexity to the things that she wanted to achieve... it's almost like a coaching environment as well ... the sort of coaching you might do in a business sense that someone's saying ... look, I really want to achieve this promotion at work and then you're going ... OK, well let's look at all the circumstances and see if we can unpick.

The complexity is somewhat akin to running behind your child when they first get a bike without training wheels ... and you've got to let go of the bike... but if they fall off and hurt themselves and break their arm, you know your wife's gonna kill you. You know that you'll feel dreadful. So what you've got to do is let them go... and engineer the situation so that they're as safe as possible but there's a risk.

...you almost introduce sessions or set sections of sessions ... this was very much sort of ... bigger blocks ... so you would have a bigger block ...and in

the session, there would be segments ... oh I'll do a segment on that, segment on that, segment on that ...

...you bring yourself and the client back to their targets ... you might modify those targets. You might go ... well; actually you said you wanted this ... is that still what we're going for? And then she might say ... well, that's less important I think than this ...

So I'm working with individuals. I am working with the coach. I'm working on the individuals and on the coach and on the environment.

5.3.2 Nature of Goals and Planning

Emergence of goals, many set up through process or/and experience of intervention

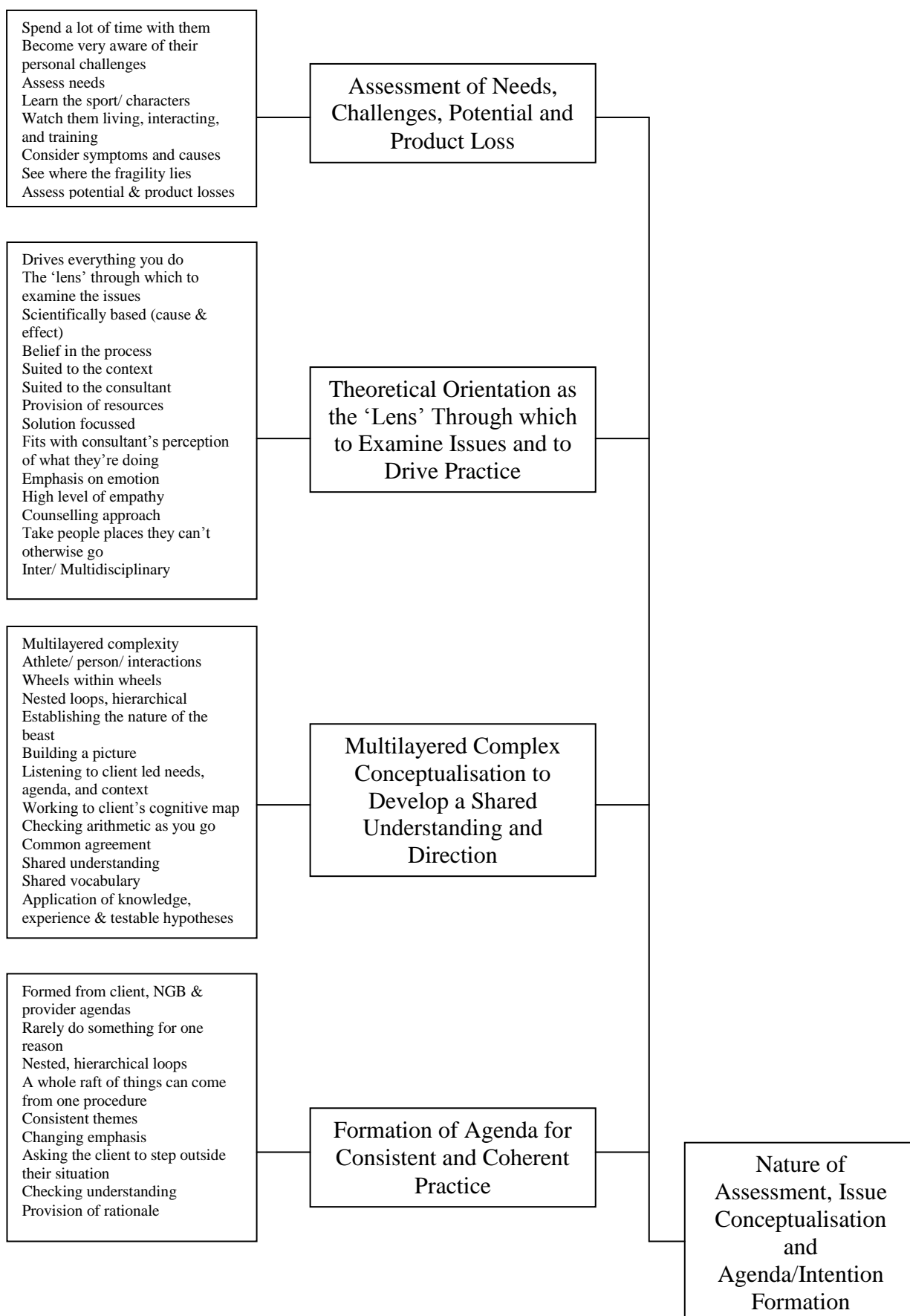
The psychologist reported that goals "emerged" from discussions and were often established through the process of intervention (i.e., as a goal is pursued, subtexts to the goal can be revealed).

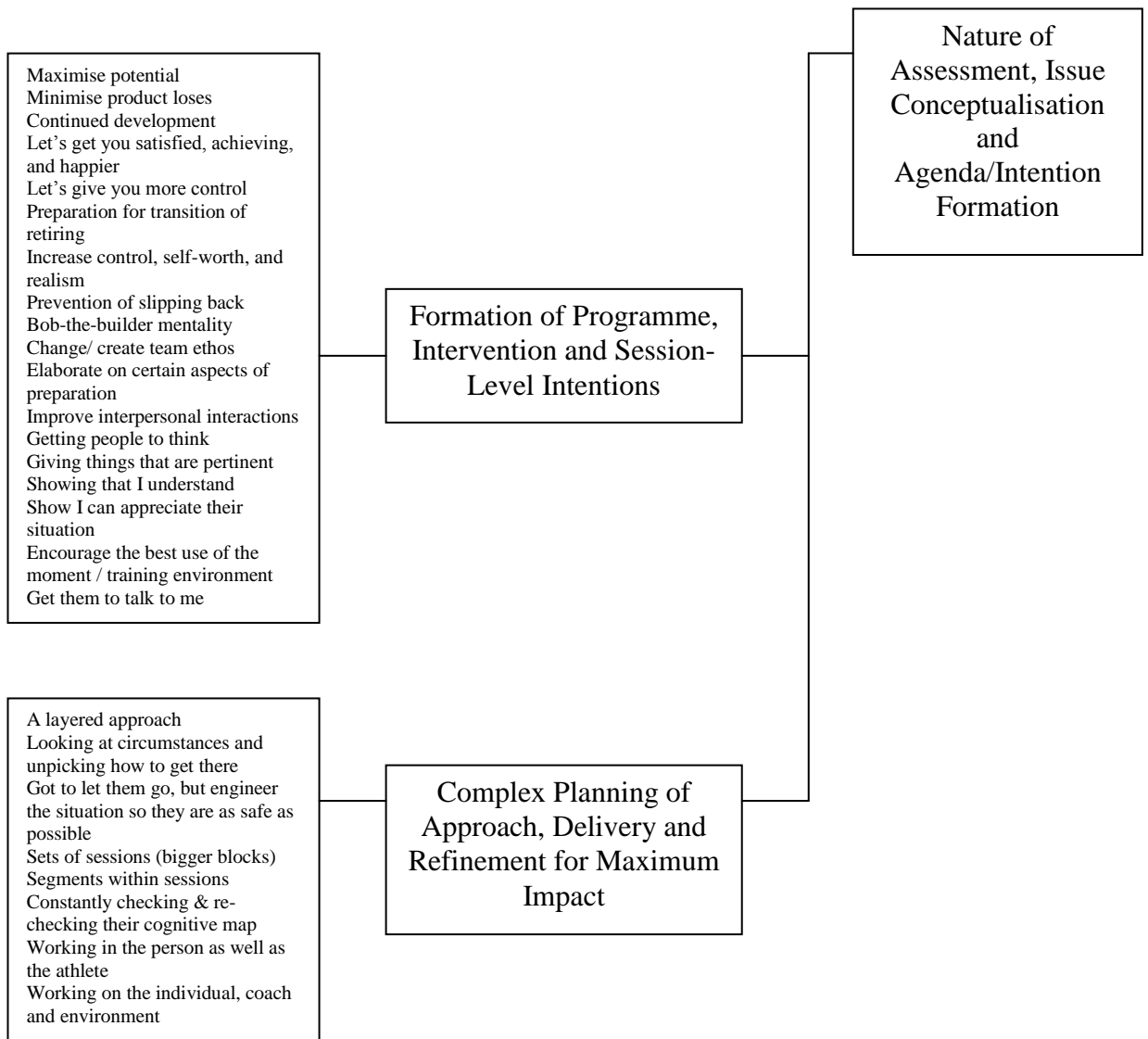
I'm not just talking to them about the psych bit; I'm talking about everything else. So I come in with a fairly multi-disciplinary agenda. I guess I'm learning the sport and starting to learn the individuals through this period... I think establishing the goal is crucial ... so when someone says, help ... you then have to start exploring ... help what? ... What are the markers ... and then to almost drill down from those markers because ... you could do a very surface job ...

You then go ... actually, why is that goal so important to you? Why is that such a big thing? And ... it's like the size of the target actually obscures the genuine things that are preventing you achieve that target. So when she sets the target, of course it's important to clarify that but then ... in certain circumstances, it's important to say ... so what are the things that are preventing you make that?

It's ... it's more a *modus operandi* ... it's more a way of pursuing the goal. So if someone says, I really want to play for England at rugby ... and you'd go ... OK, well, what's stopping you? Well, it might be where you're playing, it might be the size, and it might be your fitness ... let's do that and that and that ... so the goal is still the goal ... but there are subtexts to the goal.

Figure 5.1. Nature of assessment, issue conceptualisation and agenda/intention formation





Performance oriented goals to encourage control, empowerment and confidence

The psychologist suggested that goals were always performance oriented with the objective of encouraging control, empowerment and confidence as the following quotes demonstrate:

Well the goals are always performance.

So I'm talking to [the athlete] very much about what he needs to do, how he needs to adjust his life. I know he's got the mental skills, I know he's got all the stuff he needs. This is more a sort of a let's work through the difficulties and see if we can put you in a situation where you can.

My goal was to try and get her to rationalise what [the sport] was in her life and why so much of her self esteem relied on [sporting] success and failure... So my goals in phase 1 were very much a self awareness ... how are you, how does that make you interact with other people, how do those interactions then affect the various things that happen to you ... your chance of selection,

...how your mum gets on with you, how you get on with your peers, how university is, how life is.

...come on now, let's get you satisfied, let's get you achieving, let's stop you slipping back into this self destruct mechanism... let's give you more control, let's make you happier ...

So you've then go to say ... hey mate, look, calm down, just let this happen. You are the little wood spider in the wood pile... you are the thing that's stopping this. So I've got to make him very confident...making [the athlete] comfortable is a big part of it.

...she's much more in the driving seat. I'm now almost in a withdrawal phase. I'm now stepping back and going ... go on girl, yeah, that's great ... oh you did that, that's fantastic ... oh yeah, I hadn't thought of that, well done ... and I'm far more going ... go on, get in there, you take it, you take it, you take it ... I'm trying to encourage her to talk to other people ... trying to decrease my importance within what's going on. I'm almost on an exit strategy.

Multi-level, nested and hierarchical planning

The psychologist reported that planning of support took place across multiple levels (e.g., 4 year cycles, annual, and extent of magnitude). In addition, planning was nested and hierarchical, so rarely was a course of action taken for a sole reason:

...we've got a plan B and a plan C ... got all the schedules worked, we know when we're trying ... this, that and the other ...

As it so often is for athletes, your whole life is conditioned in four year cycles strangely enough things start happening in four year cycles... what will I do after Beijing, will I go through to London, what will I do after London...

Planning here has been very extreme... quite thorough ... and has gone through a number of iterations ... then, as we've implemented the plan ... we've tweaked it and refined it ... so that the level of planning ... the detail of planning has been a magnitude higher...[the plan] is more complicated in terms of the number of facets intervention. It's complex because of the character ... the personality ... the personal factors ... because of the number of layers ...

...there are levels of what I'm doing ... so I'm rarely going to do something for one reason. I'm much, much more often going to do this and as a result of that, then this could have this and this and this and this. So it's very, very much nested loops, hierarchical ...

Clear planning to anticipate individual needs and potential benefits

The psychologist revealed that his planning process was designed to make the situation very clear to the athletes. He reported anticipating their needs and making the benefits of the support planning transparent to the athletes and support team:

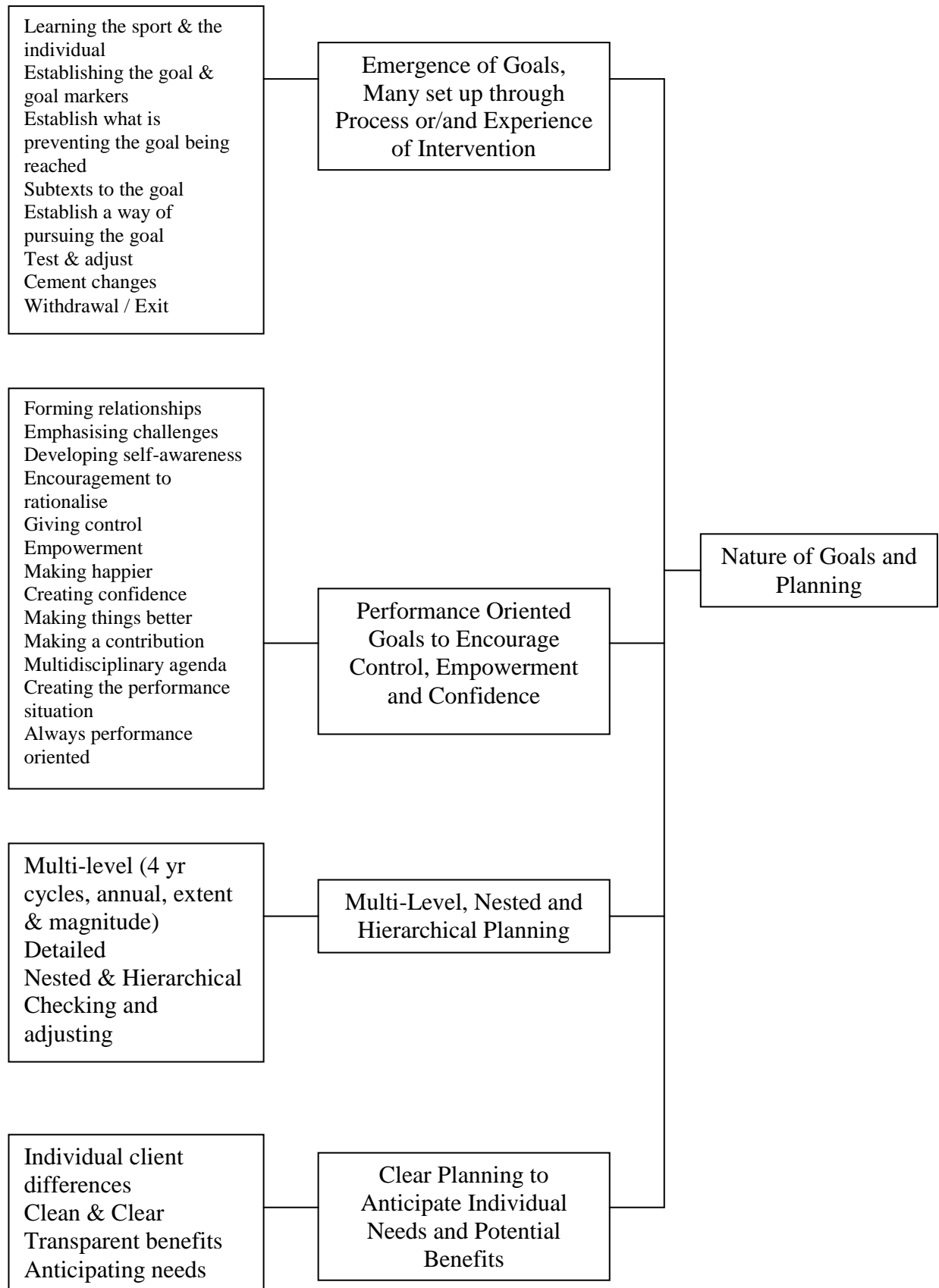
So what I'm trying to do is to get him to a situation where everything's very, very clear and clean.

I anticipate their needs ...we know where things are coming up; we know there's a key challenge coming that weekend, what have you done? Has that sorted? That's good ... can you send me some stuff about it? That's great. I've turned it round; it's back to you, etc, etc.

5.3.3 Nature of Support Provided

The psychologist reported providing support across multiple levels identified to be programme level, intervention level, and session level.

Figure 5.2: Nature of goals and planning



Programme-level support

Support at the programme level addressed holistic and over-riding issues which had an influence on the athletes' overall training and preparation programme. This included lifestyle issues, personal development, encouraging responsibility, setting team structure, and developing the squad training environment. The following quotes exemplify these areas:

...we're now looking at where she's living, she's now sharing a flat... and I'm looking at more lifestyle issues and how she keeps herself right.

But here you start talking much, much more about the way in which we're going to set the structure of the team... we've all got together and said now what's going to be our running. How are we going to plan our year...

My perception is that the nature of what we did together was ... we worked more on her than on her as a performer through this phase ... everything had ... for me ... a subtext of trying to get her to behave in certain ways.

Intervention-level support

Support at the intervention level included input from the psychologist in the form of 'interventions' (i.e., the development of strategies, techniques and skills to aid performance). This included establishing routines, contingency planning, skill deployment, developing communication, managing relationships, operationalising technique, developing coping strategies, imagery, impression management, and channelling emotion, amongst others. These areas are exemplified by the following quotes:

I was giving him answers and giving him new perspectives, different ideas ... that builds on the stuff he had. He thought ... oh, I'm really well prepared ... and I was going ... well, yeah ... and we can go another level ...

...set targets for herself but use the other guys, use the squad setting. Don't see it as a threat, see it as a link, exploit it, make the most of it.

...it's not so much building. It's deploying. We've built ... we've given her the skills. She's got the skills in phase 1. It's now deploying the stuff ... I'm not at this time capacity building in any real sense. I'm capacity deploying.

So I'm coming up here with ideas about practice, I'm coming up here with ideas about starting to operationalise certain features of their technique... I want a situation where all these people are reconciled; they're all pulling in the same direction...

You're chasing round after... sweeping bits of people's egos into a pan and putting them away so it looks tidy and I wanted to get that out upfront and break through it...

I've recognised how much there is on him and I'm starting to try and take stuff off him... and when I say take stuff off him, I'm trying to say ... look, organisationally... how can I help, what can I do, can I organise that for you, can I do that for you?

...we're really starting to manage upwards... so we're starting to manage others; we're starting very much to manage how he is perceived, to manage how he is dealt with, etc, etc.

Session-level support

Support provided at a session level included immediate input from the psychologist during individual sessions. As the following quotes illustrate, this included aspects of counselling, personal support, encouragement, facilitating reflection, identifying and discussing limiting factors, giving perspectives/ opinions/ answers, fixing things, and relieving pressure:

A lot of what might be properly described as counselling. A lot of discussion, a lot of thinking through, a lot of asking ...
...you know how children like routine ... certain athletes like routine. So what's more, it's probably safe ... and I do this with you and I do this with you and do this with you ... we're right behind you mate ...

...the worst possible thing you could do is to over-complicate matters. So you've got to be careful when you're at an event ... keep it simple ... Just break it down ... That's what it is. Just keep it simple. What can go wrong? A, B, C ... what do we do? ... D E F ... thank you.

Perusal of additional goals outside the stated objectives

The psychologists reported that he sometimes worked to address goals or issues which were outside the stated objectives of the support for example, skill development and understanding, looking at other factors that could be strengthened, seeking to add value, working with dynamics, and influencing tactics and strategy.

The following quotes exemplify some of these points:

...what I'm doing is not conventional mental skills training ... it's not mental strategies. I'm not saying, hey let's do some goal setting ... it's not that at all. It's psychology with a capital PSY ... it's saying what is it fundamentally about these situations that is creating a problem? Let's unpack them, let's try and drill down and look and you're applying a broad knowledge base in psychology ...

I felt that I needed to get to know the bloke more ... that's really the level at which I work. I'm working in the person as well as in the athlete ... if that makes sense.

I'm very much bringing an agenda that says let me look at this process from a skill development and a skill understanding point of view, let me look at it from a physiological point of view. What are the physical demands of this game? How do the physical demands interact with what they are required to do?

I was starting to unlock, starting to look at some of the factors within him that could be strengthened to making him stronger and that could be mediated to prevent him shooting himself in the foot and limiting his performance. Told him so too....you know ... really ... is there anything going on underneath. ...we keep harking back and saying ... look over your shoulder, look where you've been, look where you are. And so she's aware of it. There's nothing covert. I'm not sort of ... the grand puppeteer...

Informal use of MST to increase control and provide a vehicle for relationship building

The psychologist revealed that, as his skills developed over time, he used mental skills training more informally and as means of providing the performers with a sense of control. Additionally, the development of these skills served as a vehicle

by which to build the working relationship, so that other factors and issues could be subsequently addressed:

The mental skills she's got we're now deploying to different areas, we're trying to show her, to give her confidence ... that look you can use this, here and here and here.

...this is 15/16 years ago, and at the time I would say a lot of the things that I did were not as advanced so my vector, as it is now, was probably mental skills but they were a lot more formally mental skills than they would be now if that makes sense.

...the skills were just like the something, something to talk about. You know, I could have talked about a choice of clothes in colour except that I know nothing about that...

...this is a senior athlete, he's already got lots of mental skills so you're honing them, you're refining them. You might add in a couple of things...

...there was a drawdown of some of the things she did ... So for example, she used imagery and there was a drawdown of imagery to put into preparation for training sessions ... that was showing her that she had skills that she could use and increasing her sense of control So, I taught her skills but I did that more to say to her, look ... you've got the kit ... look, you're good, you can do this...

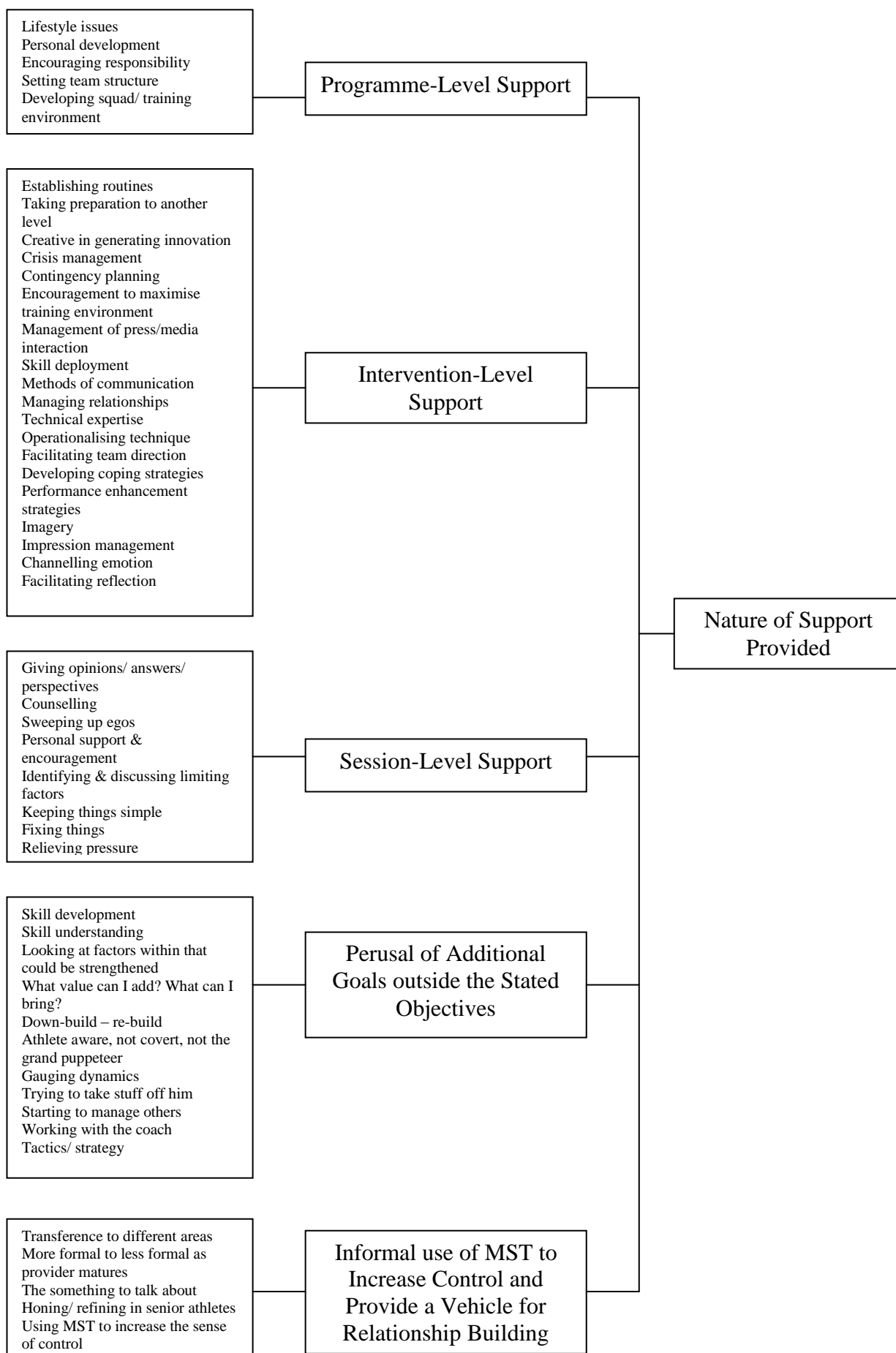
5.3.4 Nature of Modus Operandi

Paternal/fraternal, scientific and educationalist performance consultant

The psychologist described his role as sometimes paternal or fraternal in nature, advising on life issues outside of sport. The dominant role, however, appeared to be that of a performance consultant through providing education about mental skills, encouraging skill deployment, and listening to performer needs and issues:

A staggering amount of planning for the team and the structures through here and almost as a performance consultant... I've almost stepped into a team manager or team consultant role here.

Figure 5.3. Nature of support provided



...this is quote just before we're going to Negados... to the pre-Olympics. Someone says I don't really know what he does but everything goes better when he's there.

I'm almost like her father ... helping her through a break-up ... helping her make some career decisions. Towards the end we see less of each other, there's a cut somewhere round here [indicates on time line] in the formality of my relationship. Really intense stuff, and very small, tight-knit community, tight-knit group and having to be the guy in there and working with them. And then having to be the, the barrier, the buffer between the coach...

So am I teaching mental skills? Course I am. Am I encouraging her to use them? Yes. Am I encouraging her to take skills she's already got and deploy to another area? Yes. Am I just talking through with her, am I sometimes just being a, you know, a thoughtful, open listener to some of the issues she's facing. Yes, all of the above ...

I went into the session with a number ... if you want to call them testable hypothesis ... I guess this might be going on ... let me take it up that line and see. I think this might be happening. Let me take it down that line and see ... see ... and so this is the process that I would usually do with a client having got the understanding, the sense, established rapport, etc, etc. Here, I was going ... let's press this button ... woah ... everything lights up ... let's press this button ... right ...

Interdisciplinary, challenging consultation working in the person to provide resources and create the best situation for the athlete

The psychologist reported that his support was very interdisciplinary in nature, that he was a challenging consultant who worked in the 'person' as well as in the 'athlete' to push boundaries, remove roadblocks, and provide resources to manipulate the circumstances / situation to be the best for the athlete. The following quotes demonstrate some of these points:

I would always provide athletes with a rationale as to what I'm doing ... I want them to start thinking ... I want them to be able to retain and transfer this knowledge.

So there were a lot of questioning, a lot of emphasising, clocking and 'no did they' type of stuff. A lot of starting to gently test and challenge some of the assertions especially when the assertions made by her mother and her did not coalesce.

And this is why it's interesting because I've pushed the boundary out in front and now it's, I'm reactive again and trying to push it ...
...it's the way I like to work. It's very behavioural, it's very, very recorded, and it's very upfront.

...it's manipulating the situation and the circumstances so that their best for [the athlete] and [the athlete] can make the best use of them.

...we all get together, we all sit there ...we do it collectively and individually and we discuss ... is this the case, what's the agenda here... have we hit that... what about this weight loss through the season, where's that coming from, what are you thinking, have we checked that, medically have we checked ... so it's a very, very inter-disciplinary...

I felt that I needed to get to know the bloke more ... because that's really the level at which I work. I'm working in the person as well as in the athlete ... if that makes sense.

It's getting her to know what she's done in the past, which has made it work. It's getting her and it's almost removing the roadblocks, we've gone out in front of the pro-active stuff and now it's saying, all these things you need to do let's just make sure they're there.

Gradual and early layering of support to move performer towards long-term goal

The psychologist reported layering the support provided to performers to gradually move them towards their long-term goals. This involved working both in big blocks and little and often depending on the circumstances and was accompanied by a constant test and adjust approach:

Well, you can't do everything at once... so you have to layer stuff on ... it has to come in gradually enough and early enough that he's completely confident because expectancy affects confidence etc, etc ... but it has to come in close enough that he isn't bored with it ... So you try to always put a new wrinkle on... he has to feel he's moving forwards...

...especially early on ... the sorts of things we were talking about were reasonably heavy duty and they required lots of time in a safe place with the capacity to isolate, elsewhere working with other clients, you would hear me say little and often ... here it wasn't. It was big block ... I'll go away and I'll see you in a month... talk to me on the phone about this ... keep me reminded as to what's going on.

...this becomes much more little and often... and it becomes like breakfast meetings, snatched meetings ... I'm down your end ... do you fancy coming down and have a chat? ...there'll be telephone conversations, couple of texts before she's competing, this that and the other ... a couple of conversations with her mum ... that sort of stuff. But it's much more little and often and it's more reinforcement ... come on, let's go for it ... and this is where it's really, really hard to work as a psychologist who's outside the system. Were I part of the system, seeing the system... I'd be trying to change the system ...

...there's a constant test and adjust ... how well is she doing? How well did she do in that last challenge? Did I give her enough support? Did I give her too much support? It's a constant test and adjust. It's a constant to-ing and fro-ing with this long term goal.

So even though the wobbles of the bike might be like that ... the path is onwards and upwards and that means you have to keep thinking about ... what am I going to say today, what am I going to say in this session now, what am I going to be doing in the next week or so is build up to this event ... and what am I doing across the season to move to a situation for the future.

Encouragement and promotion of self-awareness & retention and transfer of skills and knowledge

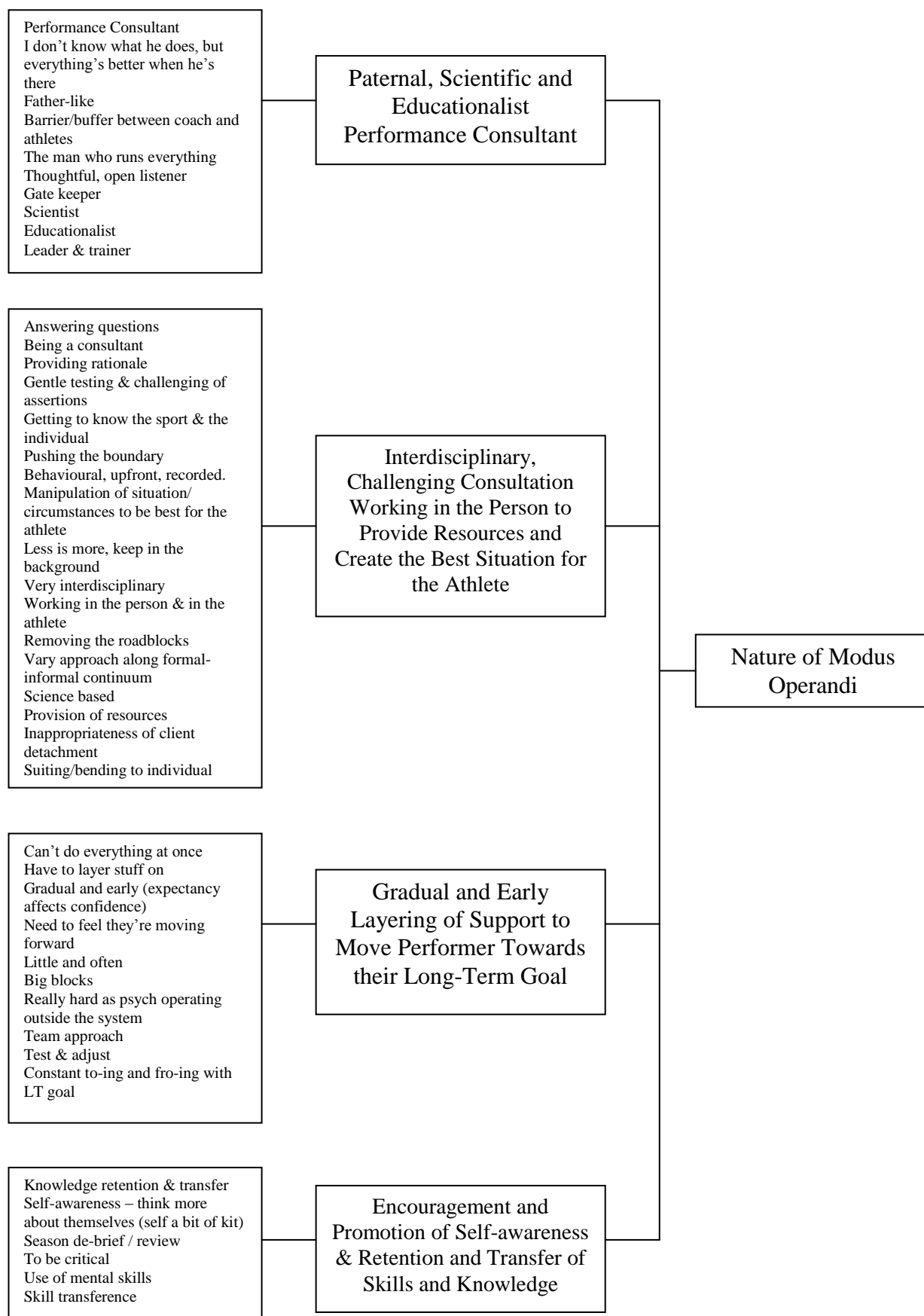
The psychologist reported that he worked in a way which provided encouragement, promoted self-awareness, and the retention and transfer of skills and knowledge:

I would always provide athletes with rationale as to what I'm doing because I would want them to start thinking ... I want them to be able to retain and transfer this knowledge.

What I tried to do is to get him to think much more about himself in the same sense and just go ... look, here's a bit of kit, you ... let's apply the same principles, let's think about why that works and why that doesn't, why that would be better than that, etc, etc and see how that works.

...and I encourage him. Look you've got to be critical.

Figure 5.4. Nature of modus operandi



5.3.5 Nature of the Relationship

Friendly mentoring role

The psychologist suggested that he adopted a friendly mentoring role with clients as the following quotes illustrate:

...my relationship with [the athlete] becomes much more as a friend or mentor or an elderly uncle... offering advice.

And you might say from now on I'm her friend and she phones me up and I phone her up...

I think friends are people who can turn round and say, that's not right... you do have to be careful it's not too cosy. But, in this circumstance, I don't think it has. I think it's an inevitability... you can't get ... as close to people as you need to, to do this job properly ... and not either discover that you really don't like them very much ... or become friendly with them.

Fluctuating levels of contact

The psychologist described that throughout the long-term consultancy the level of contact with clients fluctuated, for example:

You've got to be there but not be there ... I do think we're looking at a situation where you might sometimes have to withdraw where the client might want you.

I hadn't necessarily been there as much ... he might feel that my interest has waxed and waned, I think, in here [indicates point on time line] he's right...

Towards the end here we see less of each other... I stop being the national team psychologist so, there's a cut somewhere round here in the formality of my relationship.

I think there were times when the relationship has come and gone.

Changing and evolving relationship seeking to promote empowerment and independence (with clear phases – either planned, ad hoc or serendipitous)

Reflections from the psychologist revealed that that relationship and interaction with the clients changed and evolved throughout the long-term support as he sought to promote their empowerment and independence. The timelines revealed

clear phases in the working relationships either planned, ad hoc or serendipitous. The following quotes demonstrate this evolution:

I think we've become friends. I think he trusts me ... I think he knows my limitations... knows where he's going to have to cover me... he's getting confidence in me ... the security in my professionalism and complete confidentiality.

I've stepped away from this now. I'm now not so much involved. I am involved a bit but I'm doing less.

...what I'm doing is we're changing the relationship and we're changing the circumstances and I'm someone she talks to every so often ...

...she's much more in the driving seat. I'm now stepping back and going ... go on girl, yeah, that's great ... oh you did that, that's fantastic ... I hadn't thought of that, well done ... and I'm far more going ... go on, get in there, you take it, you take it, you take it ...

I'm trying to encourage her to talk to other people ... trying to decrease my importance within what's going on...

Use of communication for understanding and teachable moments

The psychologist revealed that communication with the athletes was used to create understanding and teachable moments (e.g., by using the athlete's vocabulary) as the following quotes demonstrates:

But the first bit is ... confront the enemy ... confront the situation ... confront the challenge ... what is it? Let's get some concepts we can use, let's get some labels we can use, so I can use her vocabulary.

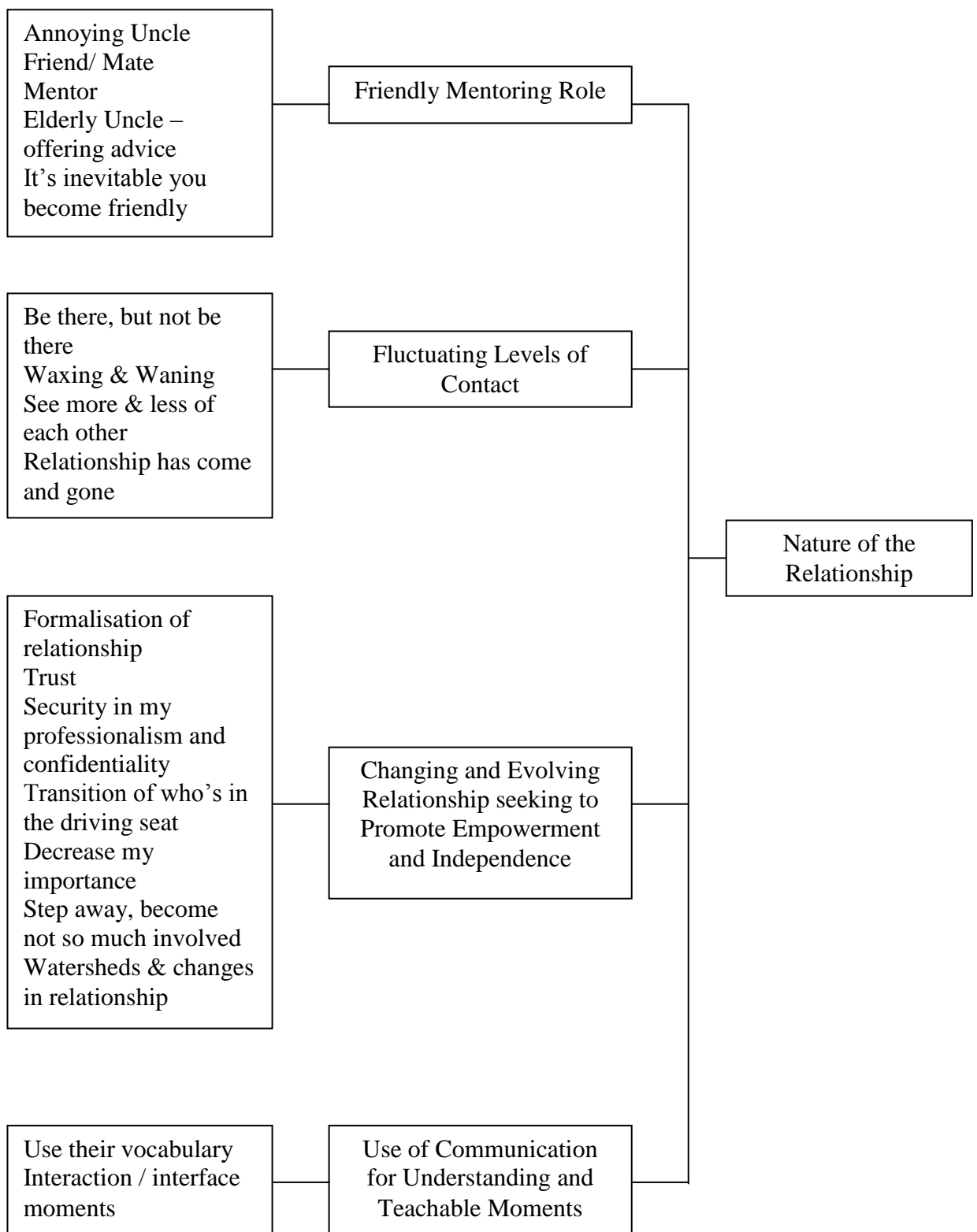
A big teachable moment, not so much a teachable moment as an interaction, interface moment. I'm quite happy where I am and I'm quite pleased with you because you helped me get to it.

5.3.6 Nature of Impact, Change and Effectiveness

Use of formal, informal, process and outcome measures to gauge impact

The psychologist reported to use formal methods (e.g., consultant evaluation forms, self-assessment tools, and reflective practice) and informal methods (e.g.,

Figure 5.5. Nature of the relationship



verbal feedback from athletes, coaches, parents, NGB's, and requests for continued involvement) to measure the process of support (e.g., changes in situation, self-perception, and process markers) and outcome of the support (e.g., performance, behaviour, perception, and emotion) in an attempt to gauge impact. The following quotes illustrate these points:

...feedback from her, from her parents ... particularly her mum ... from the NGB ... and her behaviour and what she's achieving.

We've got feedback coming back. I have used I think a couple of times in that phase things like CEF's Consultant Evaluation Forms.

...if you're effective, people will use you. If they keep using you, you must be giving them something.

Looking at ... performance, behaviour, perceptions, emotion ... Triangulated as much as possible, looking across the board, talking to [the coach]...

Performance is the bottom line ... so that's pretty obvious. But performance obviously has process as well as outcome aspects. The process aspects take you on to behaviour in the competitive arena and away from the competitive arena. The person's general demeanour. It's a massively overused phrase but do they walk the walk and talk the talk? Do they do the stuff? Do they live like an elite athlete? Do they have the demeanour of ... yes, I'm there? ... Are they confident? How do they look?

I think there are process markers that I could point to...in terms of he's fitter, he's more healthy, this doesn't hurt, he's hitting more potential, that interaction within the team is working better and wherever possible we like to triangulate that or operationalise it so it's quite objective...

Use of multi-level process and outcome measures to evaluate effectiveness

The psychologist also reported that measures of process and outcome were carried out across multiple levels of support (i.e., programme – session levels) in his evaluation of effectiveness (e.g., individual races at the micro level and full season de-briefs at the macro level):

... we do a de-brief for the season... we do a full meeting, we all get together, we all sit there ...we do it collectively and individually and we discuss ... is this the case, what's the agenda here, have we hit that, what about this weight loss through the season, where's that coming from, what are you thinking, have we checked that, medically have we checked, so it's a very, very interdisciplinary...

If they get better and they achieve as much as they think they can achieve against realistic targets, if they're beating the people they should beat, or getting close to the people they should be beaten by then that's another marker.

...we're assessing at a macro/micro level, we're assessing a micro level when we look at a race. So at the micro level, we're reviewing the runs, we're looking across the race and all the things that went with it ... and we just go ... let's review it... 3 things to work on, 3 things that went well ... and then at the macro level, we sit down at the end of the season and we do this massive case conference...

Reflection on knowledge, conceptualisation, goals, methods and process

The psychologist reported a number of questions that he asked as he reflected on practice (e.g., should I be doing this? Why am I doing what I'm doing?). In addition a list of concepts that he would reflect against was revealed to include theory, knowledge, issue conceptualisation, athletes' self-conceptualisation, goals, support outcome, support process, and comparing and contrasting with different circumstances. He also reported a significant use of peer supervision throughout his reflective processes. The following quotes demonstrate some of these points:

...it's something that you take a deep breath and say, now stop, why am I doing what I'm doing? What value am I adding? What am I bringing to the party doing this? Am I just making myself feel better? Am I just feeling useful? Look, I'm a sport psychologist at the Games, I'm doing things. But am I really doing things?

I'm reflecting against theory and knowledge. I'm reflecting against my conceptualisation of the client, their conceptualisation of themselves. I'm reflecting against what I'm trying to achieve and how well I achieve it and whether there was a better way in which I could have done it within the moment, the session ... the package of intervention. I'm obviously reflecting against goals set for the work and the goals as they have evolved...

And you have to look back at a session like that and you have to think ... did I do that well or was I clumsy?

What I did, what she did, what happened, contrast and compare, different circumstances and sets of circumstances...

...there's peer supervision running through this. I bring other people in to have a look and see what's going on.

...you then have to check your arithmetic and that's being able to turn round to someone and say, I'm doing this, what do you think? How does that match, how does that fit? So talking through it with a peer supervisor ... Checking your arithmetic, checking your audit, using the client ... let's just run through this, you just ... just tell me if this makes sense ...

I would use the people around me who I think are trustworthy and whose opinions I respect and say ... audit this for me. Give me your perspective on this. Tell me your take on this.

Use of goals, planning and consultation skills to operate as an agent of change

The psychologist reported to operate as an "agent of change" (i.e., to operate with a strong emphasis on change). This was done using goal setting, planning and conceptualisation of his *modus operandi* (e.g., how am I going to work?), creating a depth of discussion which can lead to insight, opening up and clarification, and by being mindful as to whether support work is addressing the symptoms or the cause:

So what we've come to here is, I'm now starting to say to [the athlete], look how can you make the most of this, everybody's going to get their bit of this, you have to make sure you get your bit of this. How can we do that? Could we set goals...?

How am I going to address them? What am I going to do? How am I going to work? This, this timeline idea, how can I get ahead of present?

So it's like... it's been this learn, reactive, through, push it forwards, anticipate.

That interview opened up and clarified the things that we were going to work on. What happened here ... showed, I think, some of the strengths and some of the weaknesses.

The level, the depth of discussion and insight and, you know, opening up if you like.

...you're not just talking about nothing; you're actually talking about something, which is pertinent. It's just that sometimes the thing that you're talking about addresses the symptoms not the cause...

Influence of organisational and transitional factors on overall impact

Finally, the psychologist reported that organisational factors (e.g., inconsistency in team selection, NGB set-up, and popularity with the National Sports Institute) and transitional factors (e.g., developmental/chronological focus, influence of outside factors, and transitions in overall support programmes) had an overall influence on the impact of the support:

...the amount that I could interact with the team and could contribute to the team has been very, very affected by micro politics, by the politics of the Institute and me as head of department at [a University] that's been difficult...

... this season's been a mess and the reason this season's been a mess because you've been up and down, you're coming up, you're going down when you're going down you're coming up. It's a bloody mess. Stop, let's start again shall we, let's decide where we're going to be and what we're going to do and how it's going to work etcetera, etcetera.

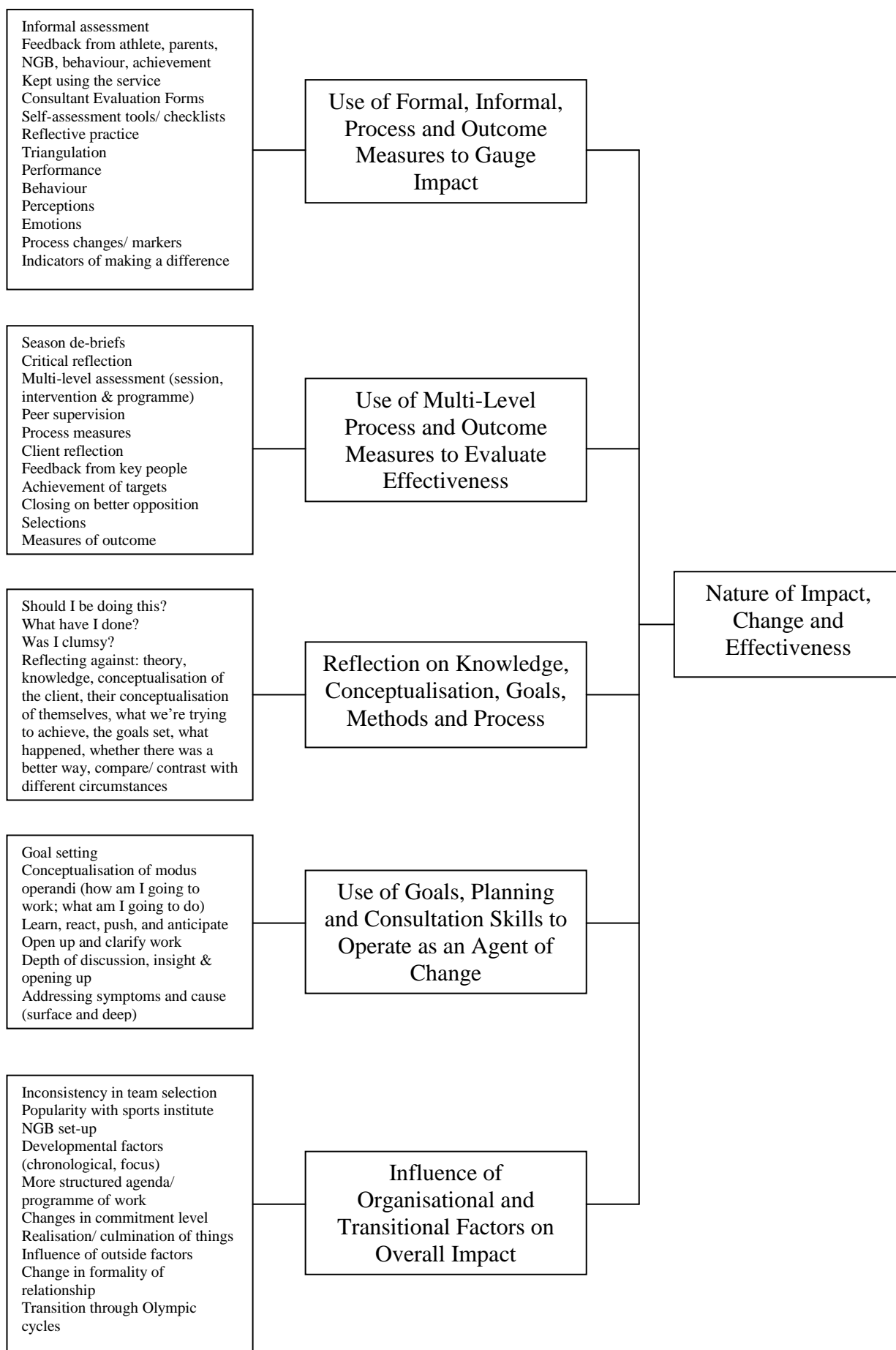
By now I am now very much persona non grata with the Institute, yeah, I'm as popular as a pork sausage in a synagogue so my capacity to go away with them and do stuff with them has decreased.

And the markers I think are ... that's the developmental phase but then they've been chronologic and focus ...

I interacted with her here when she was trying to close down her degree ... and then since she's closed down her degree, I don't think we've necessarily worked together much ... but then of course I stopped working as a sport psychologist...

...everybody has gone away with a very clear agenda but the problem is that their in transition, they're in transition because it's the end of the Olympic cycle, they've done all they've done...

Figure 5.6. Nature of impact, change and effectiveness



5.4 General Discussion

The results obtained from these interviews provide a unique insight into the nature and complexity of PJDM employed in effective long-term consultancy, and in particular, what was considered by the provider to create impact and to be effective in practice. As such, the data collected in this chapter contributes directly to the overall purpose of the thesis in terms of establishing what we can learn from effective consultancy in order to enhance practitioner performance and in particular PJDM expertise. A complete summary of the emerging themes is displayed in Figure 5.7. This figure represents the cycle of assessment, deployment and refinement in applied sport psychology practice with the nature of *modus operandi* and the nature of the relationship at its core. It is presented as a 2D wheel; however, it is envisaged to be continually replicated and refined in an upward spiral toward performance enhancement of the client and the practitioner (i.e. this cycle is a cross section of a 3D spiral).

A huge amount of data were generated from these interviews, however after careful consideration of the thematic analysis, certain overall messages are apparent and these are now discussed in turn:

The amount of PJDM present in the psychologist's practice is extensive and this runs throughout the thematic analysis. For example, the use of theoretical orientation as a 'lens' through which to examine issues and drive practice, the complexity of issue conceptualisation, the formation of agendas and multi-level intentions, and the depth of planning for delivery are clear indicators of PJDM. These concepts are also reflected in the goals and planning, the support provided, the *modus operandi*, and the relationships formed (e.g., nested and hierarchical planning,

multi-level provision of support, challenging consultation working in the person, gradual layering of support towards long-term goal, and the changing and evolving nature of the working relationship).

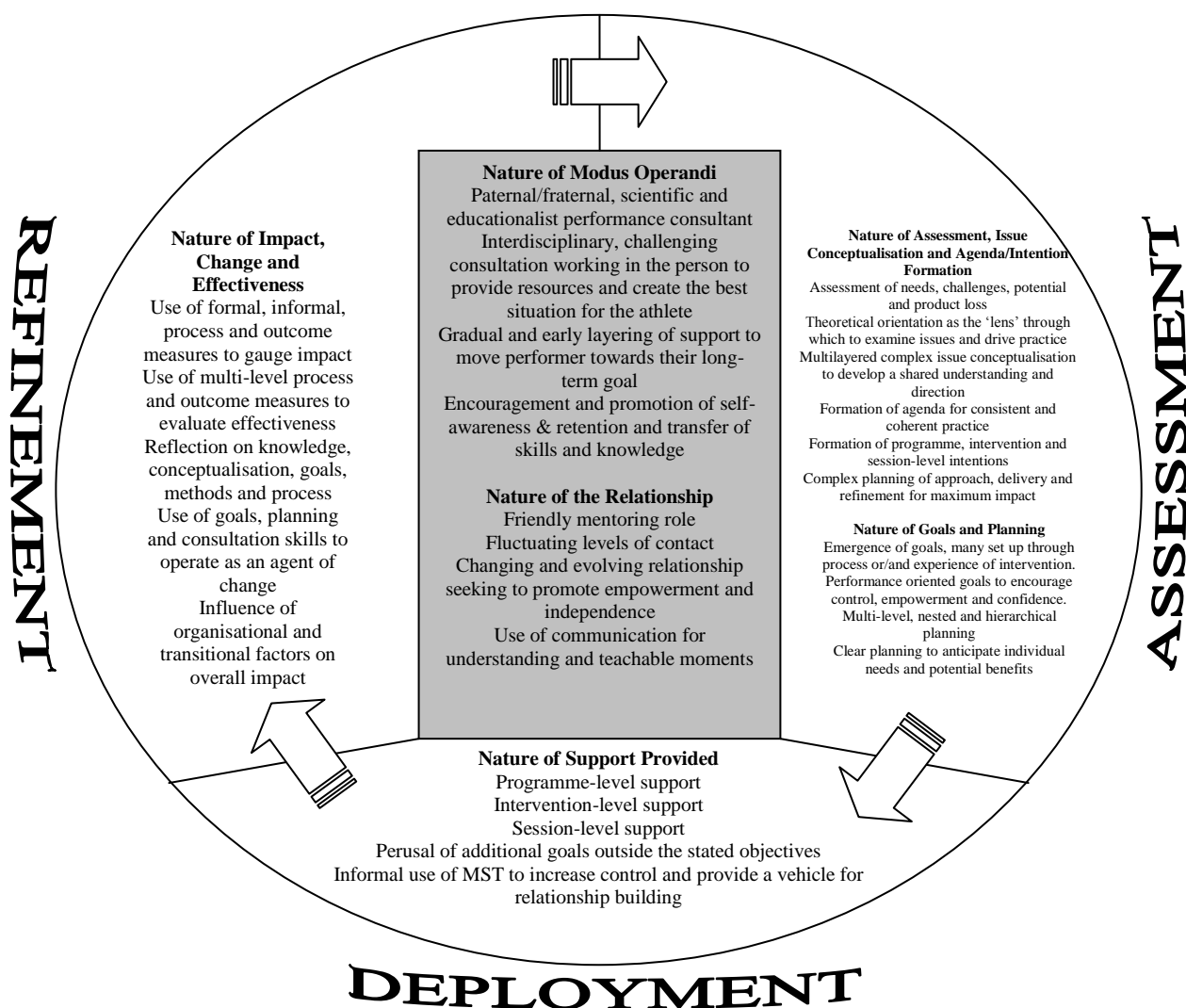


Figure 5.7. Summary of thematic analysis for practitioner reflections on long-term sport psychology support

The strong emphasis on planning and the gradual layering of support is indicative of an attempt to impact on the performers at a deep processing level (i.e., for lasting, enduring change rather than short-term, quick fix solutions). Additionally, the encouragement of control, empowerment, confidence, and self-awareness along with the promotion of knowledge/skill retention and transfer, suggests the adoption of a professional philosophy which seeks to make the performer independent. This is in direct contrast with literature which suggests that the long-term provision of sport psychology support may be good for the psychologist, but not for the athletes (e.g., Kremer & Scully, 1998). Reflections offered in this chapter suggest that it is entirely possible to promote independence and empowerment over extended periods of support.

The psychologist was open about the use of an element of challenge in his practice. While this is a recognised form of practice in CBT based orientations (e.g., disputing irrational beliefs in REBT, Ellis, 2001) it has yet to be fully accepted in sport psychology literature. For example, Anderson et al., (2004) refer to a “movement away from problem centred approaches to humanistic athlete-centred approaches” (p. 189). Following on from this use of challenge is the suggestion that the psychologist can operate as an “agent of change” to move performers toward their long-term goals. An interesting question is whether the athletes themselves considered this style of interaction to be effective (see chapter 6).

The working relationships were described by the psychologist to evolve from being initially directive in nature to being more collaborative. This reflects the “therapeutic environment” utilised in CBT orientations (Hazler & Barwick, 2001). Additionally, the psychologist reported fluctuating levels of contact throughout the

support suggesting that the level of impact may not be proportionally linked to the amount of contact. Sometimes this fluctuating contact was due to external circumstances; however, interestingly, the psychologist sometimes planned these phases in order to exploit the client's experiences in *absentia* to positive effect. A further interesting question is to what extent these reflections on the relationships established are consistent with those of the athletes involved (see Chapter 6).

These overall messages have certain implications for practice, evaluation and training. As practitioners, we may be encouraged to consider the use of our own theoretical orientation as a 'lens' through which to examine issues and drive practice, the complexity of our issue conceptualisation, the formation of our agendas and intentions, and the depth of our planning for delivery. Additionally, we may be encouraged to consider the timescales on which our practice is designed to impact, and whether the relationships we establish, and the *modus operandi* we utilise are consistent with the environment suggested by our theoretical orientation. We may also consider the ways in which we evaluate our work and whether enough emphasis is placed on the process of what we do and why, as opposed to the outcome of support.

In terms of the evaluation of our practice, there appears to be a level of disparity between some the constructs utilised in formal evaluation procedures such as the CEF (e.g., feeling 'comfortable') and in the characteristics and practises that are being displayed on the ground in current applied practice (at least in the use of the CB orientation by this practitioner). This supports the contention that current evaluation practices may not be meeting all the requirements of our evolving profession. For example, there has been little research or guidance on *what* exactly a

practitioner should reflect on (beyond generic constructs e.g., knowledge in action; Schön, 1983), or against *which criteria*, in order for them to find evidence for their effectiveness. The case has previously been made that decision making processes may be vital components of reflective practice (see Chapter 2). However, in order to accurately reflect on PJDM and intentions for impact, a recognised set of processes and procedures should ideally be complemented by clearly established vocabulary, and agreed criteria against which to reflect. It could be that the constructs reported in this study would go some way to establishing this initial vocabulary and criteria. Furthermore, the time scale to which the practitioner is operating has implications not only for the practitioner's intentions and subsequent characteristics displayed, but also for the time scales over which an impact is intended to be made (i.e., over the period of a session, intervention or entire program of support). Again, this has implications for the methods and mechanisms used to evaluate applied practice.

The final implication is for training novice practitioners, it would seem appropriate, given the increasing trend in this type of contract, to encourage the development of the knowledge and skills necessary to manage long-term as well as brief consultations (e.g., issue conceptualisation, ongoing agenda and intention formation, encouraging the emergence of goals through the process of intervention, the provision of support across multiple levels, a *modus operandi* that can cater for the gradual layering of support, and long-term relationship management).

These overall messages require verification of effectiveness from the athletes concerned before they can be promoted as examples of good practice. Indeed, athletes' perspectives on practice are essential for establishing the effectiveness and impact of support, after all it is them who experience the 'receiving' of support and

who ultimately decide whether (and to what extent) it was of use. As such, the next chapter investigates the nature of effective long-term sport psychology support, and in particular practitioner PJDM and the importance of the relationship, though the eyes of the athletes.

Chapter 6. Athlete Reflections on Long-Term Support Programmes

6.1 Introduction

As a continuation of the “examination” phase of the thesis this chapter, linked in a two-part series with Chapter 5, involved the collection of data from athletes to illuminate the nature of effective long-term sport psychology practice. Specifically, the aim of this study was to capture and describe central themes across the varying circumstances of effective long-term support received by four individual athletes. In this chapter the perspectives and reflections of the athletes who had worked with the practitioner described in Chapter 5 were analysed and interpreted.

In particular, the evolution of the working relationship between client and consultant was considered, especially given the assertion by Petitpas et al. (1999) that the sport psychology consultant-athlete relationship is a critical component in successful sport psychology interventions. Indeed, the nature of long-term consultancy suggests that the associations formed and the outcomes achieved were successful; otherwise it would seem unlikely that the support would have continued over a number of years unless the consultant were clearly an employee of the sport rather than the athlete’s choice. Specifically for the purposes of this thesis, the study of long term sport psychology consultancy was designed to reveal the qualities, characteristics and approaches of an effective consultant, which is of particular interest to novice and developing practitioners.

Furthermore, there is an increasing likelihood of applied sport psychologists being involved in long-term consultancy with clients over a number of seasons, years, or major event cycles such as World Championships and Olympic Games

(e.g., Bull, 1995; Hardy & Parfitt, 1994; Maynard, 2004). This is due in part to the growing number of individuals employed on a full-time, permanent basis by professional clubs, National Institutes of Sport, National Governing Bodies, and Olympic Committees. Such organisations are encouraging consultants to build up their knowledge and understanding of sport-specific challenges and demands to enable them to assist athletes and coaches in mastering the relevant mental skills for their sport (e.g., USOC Sports Psychology Services, 2007). In addition, once rapport and trust have developed and effective working relationships have been established between the clients and consultant; there is a tendency for that support to be viewed favourably by the client and therefore to be utilised again in the future (Petitpas et al., 1999).

Despite this trend, however, there is a scarcity of literature regarding the nature of long-term consultancy in applied sport psychology. Notable contributions come from reflections on a 5-year consultancy program (Bull, 1995) and the development of a model for the provision of support to a National squad over 6 years (Hardy & Parfitt, 1994). Bull (1995) describes the method and content of service provision across four phases of delivery, and reflects on successful and unsuccessful aspects of the programme. Although the paper concludes with recommendations for delivering extended sport psychology services to an international team, there is little indication of how the role of the consultant, the working relationships, or the type of support provided may change across the years (i.e., the nature of the relationship, the nature of the goal, and the extent to which these fluctuate, evolve and develop throughout this time). Hardy and Parfitt (1994) describe and appraise two different models for providing sport psychology services over a number of years. This analysis

provides an indication that sport psychologists may assume diverse roles according to the type of approach taken and that differing models may be employed in different phases of support. While Hardy and Parfitt (1994) highlight the importance of the relationships established, working out with psychological skills training, and “teachable moments;” these constructs are worthy of further exploration, so that the implications for long-term consultancy practice can be more fully established.

Even more notably, none of the studies to date have integrated perceptions of both client and provider, and the ways in which this dyad interacts through the ‘life’ of the support relationship. Some parallel investigation may be pertinent in this regard. The nature of the coach-athlete dyad has perhaps been investigated more thoroughly in recent sport psychology literature (e.g., Jowett, 2003; 2006) and a conceptual model of the coach-athlete relationship has been developed (Jowett & Cockerill, 2003). There would seem to be some obvious similarities in coach-athlete relationships and long-term sport psychologist-athlete relationships in that they can exist over a number of seasons or years with the ultimate goal to produce a combined outcome of improved performance (as previously stated, it is acknowledged that this is not the case for all practitioners). These relationships can be characterised by progressive and regressive cycles (Wilmot, 1975), positive and negative relational components (Jowett & Meek, 2000) and the concepts of closeness, commitment, and complementarity (Jowett & Cockerill, 2003). Moreover, “successful” coach-athlete partnerships are influenced by the setting of goals, belief and respect in the relationship, and an understanding of the athlete’s needs, wants and desires; all of which can be considered important in the psychologist-athlete relationship. Jowett (2003) suggests that attempts to explain the complexity inherent in athletic dyads

might examine the process, content, and duration during periods of change, adjustment and adaptation.

There are other gaps in the long term psychologist-athlete relationship which deserve attention. For example, the effectiveness of long term support programs (e.g., Bull, 1994; Hardy & Parfitt, 1994) have largely been assessed by the practitioner, with contentions supported by generic consultant evaluation instruments, informal client feedback, and performance outcome. As such, impact as gauged by the client has not been directly reported (i.e., regarding at what times and to what extent significant impact was made towards performance enhancement throughout long term cycles of support).

In addition, long-term practitioner-athlete relationships have not been explored with regards to how practitioner influence (and associated behaviours) may wax and wane (consciously or unconsciously, planned or exploited post hoc) across the years and cycles of support. For example, proactive management of these relationships may involve “cashing in” on previous mental skills training or previous critical incidents and change moments. In similar fashion, practitioners may decide to ‘cool’ a relationship, subsequently exploiting the client’s experiences in *absentia* to positive effect. Notably, the long-term relationships often apparent in applied sport psychology are at odds with those established in clinical and counselling psychology where there has been a shift towards time-limited contracts (Dryden & Reeves, 2008). Although an applied sport psychologist may work with an athlete over a number of years and/or over a number of Olympic cycles, it is inevitable (and perhaps a conscious intention and ‘feature’) that they will be unable to maintain a

constant or consistent impact. As such, this is likely to raise questions about the role of the practitioner across extended time scales of support.

The investigation of long-term sport psychology consultancy also brings the potential to explore the scope of interventions implemented, since long term work should surely necessitate an evolving and multilayered agenda. Accordingly, insight could be gained into the long term planning and periodisation that may be necessary in order for athletes to produce peak performances at major events.

Reflecting these issues, this chapter presents the perspectives of four elite athletes who had received effective, long-term ongoing sport psychology support from the same provider. The athlete perspective is essential for establishing the actual resulting impact across cycles and throughout the support process (albeit retrospectively – an issue which is addressed in the General Discussion on p.166).

Specifically, the purpose of this study was to investigate the nature of effective long-term sport psychology support through athletes' perspectives of the evolution of key variables in sport psychology practice (e.g., the nature of the goal and the nature of the relationship). Of particular interest is whether these variables are identified by elite athletes as being key to the success of their support. It was anticipated that this research may confirm the importance (as gauged by athletes) of the concepts and variables utilised in service provision, support a multi-layered and staged approach to long term applied sport psychology support, provide awareness of the nature of long term practitioner-athlete relationships, and highlight further implications for professional practice, training, and future research in this area.

6.2 Methodology

6.2.1 *Participant Inclusion Criteria*

Five International sports performers were contacted and invited to participate in this study. These participants were contacted on the basis that they were elite level performers (see participant descriptors below), from a diversity of sports and backgrounds, and had been working with the same sport psychologist for a minimum period of three years or one Olympic cycle (range 3 – 10 years). These inclusion criteria were necessary to ensure participants could be considered as high performers and that the nature of support was sufficiently extended to be classified as long-term.

The participants had all worked with the same sport psychologist to limit the number of potential variables involved, allow for comparison of similarities and differences across individual support, and to gain an in-depth insight into the *modus operandi* of an experienced practitioner (25 years experience, across over 50 sports).

6.2.2 *Participant Descriptors*

Four participants who met the inclusion criteria were available to participate in the study. The sample consisted of two male and two female performers, each from a different sport. The nature of the study was explained to the participants and written informed consent obtained prior to the interviews commencing. Participants were informed that their identities would remain confidential.

Participant A was a female retired speed skater who had competed in two Olympics and six World Championships. She had worked with the practitioner for 9 years.

Participant B was a male skeleton-bob competitor who had competed in two Olympics and 8 World Championships. At the time of the interview, he had worked with the practitioner for 4 years.

Participant C was a female sprint canoeist who had competed in two World Championships and had worked with the practitioner for 3 years.

Participant D was a male curler who had competed in two Olympics and six World Championships and had worked with the practitioner for 5 years.

6.2.3 Interview Schedule Design and Pilot Studies

A semi-structured interview schedule (see appendix F) was constructed in line with recommendations suggested by Smith (1995). The issues and questions to be addressed in the interviews were selected on the basis that they were considered to be important or under-explored in the critical review of literature and practice. Consistent with the aims of the study, the primary areas for consideration were the nature of the goal (what the client and practitioner were attempting to achieve) and the nature of the relationship (how did the practitioner interact with the client to achieve the goal). In order to provide context and depth, the nature of support (what the practitioner did with the client) was considered as well as the nature of impact (how well it was considered to have worked). In addition, the nature of overall planning and impact (outside specific time-phases) and the nature of other factors and variables were considered to provide a fully comprehensive exploration. Appropriate questions related to each area were devised to address the issues identified and possible prompts and probes were developed to further enhance the interview schedule. Several drafts of the interview schedule were revised to ensure

questions were neither too general nor too explicit. To facilitate this development, input was solicited from two independent highly experienced sport psychology practitioners.

An initial pilot interview was conducted with a female field athletics performer who had been working with the same highly experienced practitioner to gauge whether the areas identified for consideration were considered important by an athlete. In particular, the nature of the goal, support, relationship, and impact were identified as pertinent, which was consistent with the content of the critical review of literature and current practice.

A further pilot interview was conducted with an independent female judo performer using the interview schedule to ensure the questions asked were appropriate and not specific to one practitioner or context, but could be generalised to other parallel support settings. These pilot studies led to the questions being revised for maximum coverage and understanding while allowing for practice and refinement of previously honed interviewing skills.

6.2.4 Procedure

Semi-structured interviews were carried out using the devised interview schedule with each interview lasting between 75 – 120 minutes. This meant that each participant was asked all of the questions on the schedule though not necessarily in an identical order due to the manner in which the conversation evolved (Smith, 1995). All interviews were conducted face to face in an environment that was comfortable and convenient for the participant.

The interview schedule was supplemented by a time line that consisted of the participants' perception of differing phases within their long-term support. These phases were determined by major events, injury, personal and performance transitions, and chronological events amongst others factors. As in Chapter 5, the timeline was used initially as a tool to jog the participant's memory and then subsequently as an interview tool to guide questions regarding the support received. Interviews were recorded on a digital voice recorder and transcribed verbatim yielding 172 pages of single spaced text in total.

6.2.5 Qualitative Data Analysis

The transcribed interview data was imported into the qualitative software package QSR NVIVO Version 2.0. A process of inductive coding was undertaken following guidelines provided by Auerbach and Silverstein (2003). This involved making the text manageable by identifying relevant text; and hearing what was said through recognition of repeating ideas and organising themes. Finally, theory could be developed by grouping themes into theoretical constructs and creating a theoretical narrative to tell the participants' stories. As such, the data analysis was embedded in grounded theory (Corbin & Holt, 2005).

6.2.6 Establishing Trustworthiness

As in Chapter 5, certain techniques for meeting the "trustworthiness criteria" suggested by Sparkes (1998) were employed to establish validity. Credibility was established through prolonged engagement with the data and consensus validation. Consensus validation was established through measuring inter-rater reliability and

76.25% of raw data quotes were placed in their higher order whilst 100% second order themes were placed into third order general dimensions. Those raw data and higher order themes which were disputed were subsequently discussed and an agreement reached about which category they were best represented by. The use of thick description and the provision of the full thematic diagrams to allow for reader judgment of potential transferability were used to address transferability. The overlap of methods used together with demonstration of credibility help to justify dependability, whilst the internal auditing and constant comparison of the data employed in the thematic analysis assist with establishing confirmability. As in Chapter 5, a reflective journal was also kept throughout the qualitative data analysis process to document difficulties, interpretations, and directions.

6.3 Results and Discussion

To recap, the aim of this study was to investigate the nature of effective long-term applied sport psychology support from athletes' perspectives using the evolution of key variables in practice. The inductive analysis of data involved the creation of higher order themes which reflected the processes involved in long-term psychology support. These are presented below in a chronological order to provide a logical context to the findings (i.e., beginning with goals and planning, and progressing through to the support received, the *modus operandi*, the relationship, the impact and change, and finally other influential factors). Of special interest are the athletes' reflections on what in particular was helpful, and their perceptions of how these factors may have changed, evolved and developed throughout the support.

As in Chapter 5, the themes emerging from the inductive analysis of the data are presented below along with associated quotes to allow the reader to gain an appreciation of the context in which these themes were discussed by the participants. The full thematic display is then included as a figure at the end of each section.

6.3.1 Nature of Goals and Planning

Diverse and wide ranging goals

Athlete reflections on the goals set throughout long-term support revealed them to be diverse and wide-ranging. These included performance goals (e.g., specific competition goals), personal goals (e.g., improving communication), process goals (e.g., improving coach relations), and outcome goals (e.g., selection) as the following quotes demonstrate:

From a personal point of view, the number one goal was my performance at the Olympic Games ...

...actual performance goals ... things that I felt that I needed to achieve by the end of that year in order to feel like I'd got somewhere...

...and kind of personal goals that are sort of outside ... kind of personal development things ...

...it would be more specific competition goals ... and how I'm going to achieve them...

Importance of goals for direction

It was apparent that the athletes perceived the setting of goals to be important for giving direction and clarifying what is being developed or worked towards:

... you've got to be able to have it clear in your mind what you're gonna work on and be able to measure the difference from start to finish and see if you've improved it, identify what the gap is and then work on it ... so for me, it's fundamental that you have a goal.

...if we hadn't decided on goals and what I was going to do, then I would still feel like I was just kinda drifting ... the whole point is that we were trying to find a solution ... and so it gave direction and kind of hope.

That's everything, isn't it? Cos it's your milestone, it's everything ... if it all works, it's everything, ... you've got to set realistic goals, ... you've got to have evidence of those goals. So, for me, it's all about ... hitting those targets.

...how are we going to improve on last year? How are we gonna finish this year and think, yeah we've done better...

Collaborative style of goal setting

The athletes reported that goal setting was mostly a collaborative process whereby they identified issues and the psychologist either suggested a direction or guided the athlete towards one. Thus, goals seem to have been *revealed* through the process of discussion and reflection as the following quotes illustrate:

I would identify something, unfortunately usually I've had a problem or if I wanted to work on something...

...and he would come along and say ... why don't you try this?

...it was a joint thing. He said to me ... right, so what do you think you need to do? ... And I made some sort of suggestion and then he sort of put that into proper words ...

He was there more to guide me so; I was using him to help push me in the right direction.

Planning and evolution of goals across timescales

It was clear that the athletes perceived that goals were in place for the long-term, often 4 year Olympic cycles, and that achieving them represented a building process. As such, goals were regarded as steps which evolved as the support progressed:

It was building ... it was kind of taking the next step and pushing me on a bit. ...it was important that we put a full four years in place and every year was a stepping stone to that end goal...

...it was more ... right, this is a four year plan, these are the steps, let's focus on this one to start with and the rest then developed.

I think as we grew here it was snowballing then ... everything was feeding off each other ...

Differential awareness of practitioner planning

Three of the athletes appeared to be aware of the level of planning that the psychologist was promoting, for example:

...every session was another step...

I think underneath it, he was thinking ... OK, well if you manage to do this this year, then next year we're going to work on this...

I always had the feeling with [the psychologist] that he'd seen further on than what I'm seeing...it's almost like he's got kind of long term plan for you before you've even got that ...

However, one athlete appeared to be unaware that the psychologist may have been operating a plan for the service provided:

I think that the personal development stuff actually just happened. That wasn't ... I'm not aware of that being part of the plan ...

It was all just ... kind of continual ... it just grew naturally ... I wasn't aware of any set plan of my psychology support.

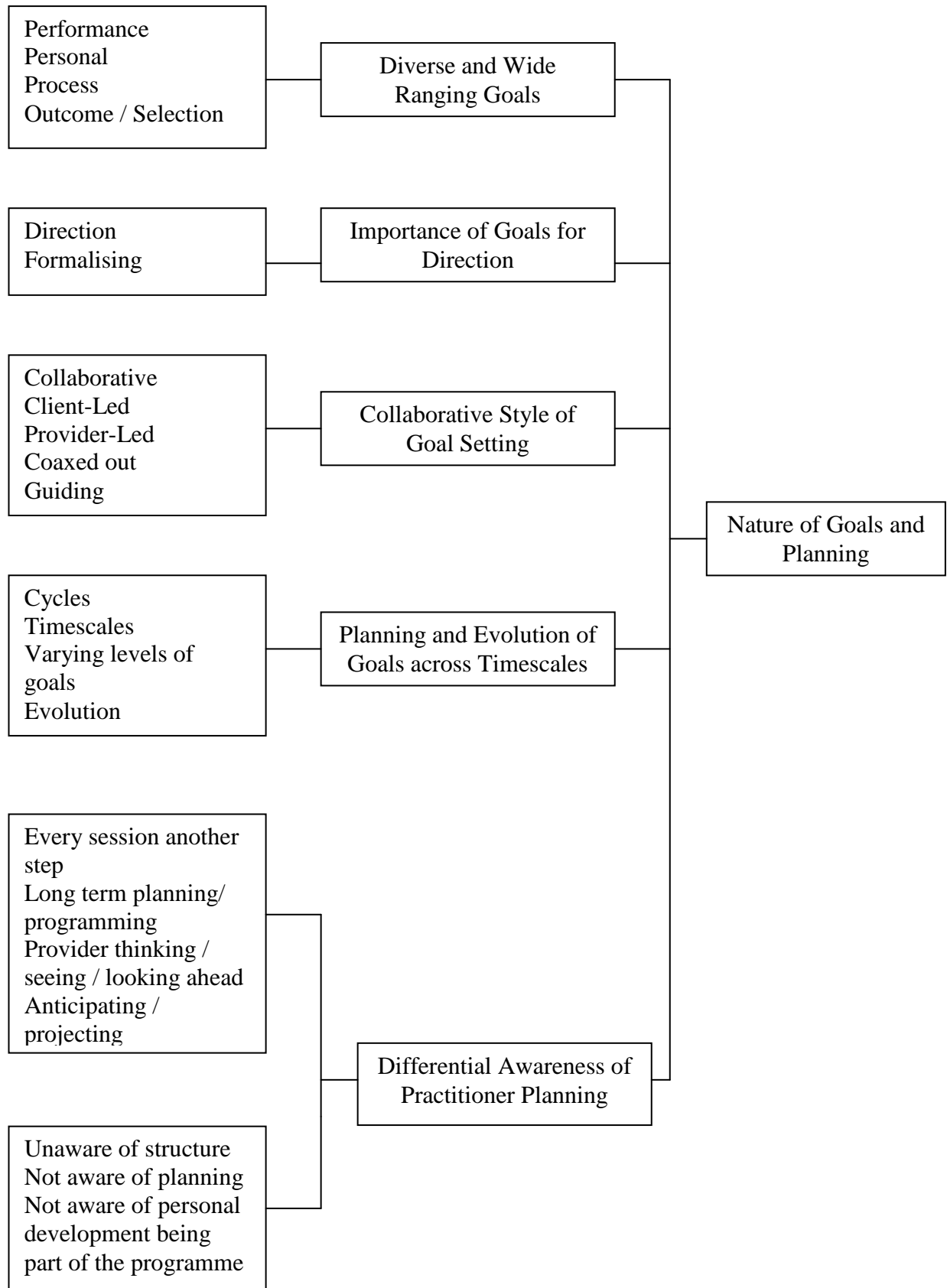
6.3.2 Nature of Support Received

The athletes reported receiving support across multiple levels, identified to be programme-level, intervention-level, or session-level.

Programme-level support

Support at the programme level addressed holistic and over-riding issues which had an influence on the athletes' overall training and preparation programme.

Figure 6.1. Nature of goals and planning



This included planning and organisation, maintaining life balance, managing politics, playing the system, relationship building, communication, overall programme management, and aspects of personal development. The following quotes exemplify these areas:

... It was kind of changing my whole attitude about sport, which came with the [sport] relations side of things...

I found it so brilliant because ... it was kind of a holistic thing ... so I wasn't going well in my sport not because of concentration ... or anything like that. It was because I wasn't happy and ... and I needed to develop a relationship with the coach ...

...looking at overall performance, my programme, strategy, politics, dealing with it all ...

...making sure that my physical development was synched with my technical development and with my season goals ... So, it was more a ... I'd say an overall performance... he was also, if you like, educating me a little bit in ... understanding the role of strategy and politics in sport ... and when's the right time to perform, why ... the world championship better to make a statement than the world cup ... and so forth ... You know, open your eyes and be a bit more savvy to what's going on ...

Intervention-level support

Support at the intervention level included input from the psychologist in the form of 'interventions' (i.e., the development of strategies, techniques and skills to aid performance). This included imagery, coping strategies, application of scientific principles, race planning, pre-shot routines, performance evaluation, goal setting, self-presentation, warm-up strategies, relaxation strategies, mental skill development, managing team dynamics, and goal setting. These areas are exemplified by the following quotes:

...then there was your breakdown of specifics to things like training, visualisation techniques... all that kind of stuff... there was warm up strategies, relaxation techniques ... using breathing ... all that kind of stuff ...

...some of the stuff we were working on was mental skills, probably about ... 30 or 40 percent ... and a lot of the other stuff was more about the planning and the organisation ... and the structure about what we did as a team...

...it was looking at the ways that we could improve. I did a lot of personal visualisation with him. Pre-shot routine, all these sorta things... it was just formalising that, putting a little bit of structure round it. He gave me a couple of techniques from an individual performance point of view that I found helped my performance ... so running through a lot of stuff in terms of technique, for the delivery of the shot and that sort of thing.

Session-level support

Support provided at a session level included immediate input from the psychologist during individual sessions. As the following quotes illustrate, this included aspects of counselling and emotional support, mentoring, encouragement, skill transference, addressing current issues/needs, and intervention planning:

I would say he did some counselling with me on things outside of [sport]... there was a lot of stuff going on with my family and my parents and just various things...

I'll ring him and I'd say, this is really, really crap ... and he'd say ... yeah, it is ... you know, but that's how it is, that's sport, and this is what we're gonna have to do ... and it was just ... you know, keep your head up, keep going for it...

...he was reminding me of skills that I'd learnt, he was showing me ways to adapt the skills that I'd learnt, so in meetings ... he said, during the injury time, ... you know how to deal with this, you have the skills in place, you just need to use them...

Integrated, holistic, building process of support provision

The support received was reported by the athletes to be holistic and integrated and to involve a building process. In particular, the psychologist's knowledge, ability to establish good rapport and respect, ability to provide clarity, and develop a sound working relationship were noted as important. Additionally, the athletes appreciated the psychologist's ability to work with individuals as people, not just performers.

The following quoted illustrate some of these points:

...my work with [the psychologist] has been a definite kind of building block thing and we never have to go back and start again because it's working on what we've done and there are times when I feel like I'm going back to square one and I say to him, I feel like I did when we first met and he'd kind of put me right and say ... well, come off it, you know ... look what you've done, so it's definitely been like a real kind of growth thing.

I haven't worked with anyone who works the same way as [the psychologist], with his kind of approach. I think the whole holistic thing that I haven't kind of come across before, is quite a key thing...

...it's always been about me ... about [the person] ... not about a specific sporting problem.

Respect, trust ... trust, for me, is the biggest one. It really is. And belief in their knowledge.

Wide ranging outcomes of support provision

The athletes reported the outcomes of support to be wide ranging including feeling calmer, more confident, greater clarity, greater control over emotions and nerves, positive focus, personal development, resilience, and a toughening up. The following quotes emphasise these developments:

...a lot of moments when in the middle of the race, I'd hear [the psychologist's] voice, ... I'd think of something he told me to do and so ... there was a lot of times when I finished and I thought ... thank you.

...in terms of giving me a little bit of direction or just giving clarity in situations if I was unsure what my direction might be ...

Just before the start line, I'd think of somebody that wants you to do well and somebody who believed in you ... that's one thing that [the psychologist's] been brilliant for is that he believes in me, but at the same time, there's no pressure if it's not what I want. It's kinda like ... he gives me confidence before I start ...

Just more resilient... if I wasn't happy with my performance, I would sit down and I'd be like ... right, I'm gonna work on this, I'm gonna work on that .. and that would instantly make me feel better... I don't know if that's something that I naturally had or whether it's something that just happened over the course of this time. Certainly, the skills that [the psychologist] taught me have helped me hone that.

I just felt that much more confident, I felt calmer, my head was clear to what I was doing, my race plans, my emotional control, my nerve control, ... just everything...

I would say the biggest influence that [the psychologist] had on me in those first 2 years was personal development ... my emotional growth as a competitor ...

...some of the skills that I'd learnt and the experiences that I'd had taught me to be tougher, ... they kind of toughened me up ... which in itself I think is a skill, certainly from this point on I was a much tougher competitor. I may not have been 100% physically but mentally I was a much, much tougher competitor ...

6.3.3 Nature of Modus Operandi

Diverse and varied role

The athletes reported the role of the psychologist to be diverse and varied. As the following quotes demonstrate this included the roles of mentor, guide, support, bag carrier, sounding board, stress reliever, manager and friend:

I saw [the psychologist's] role as ... not necessarily just as a sports psych bloke, as a mentor, to be honest, and that's what he is to me. A mentor in sports psych.

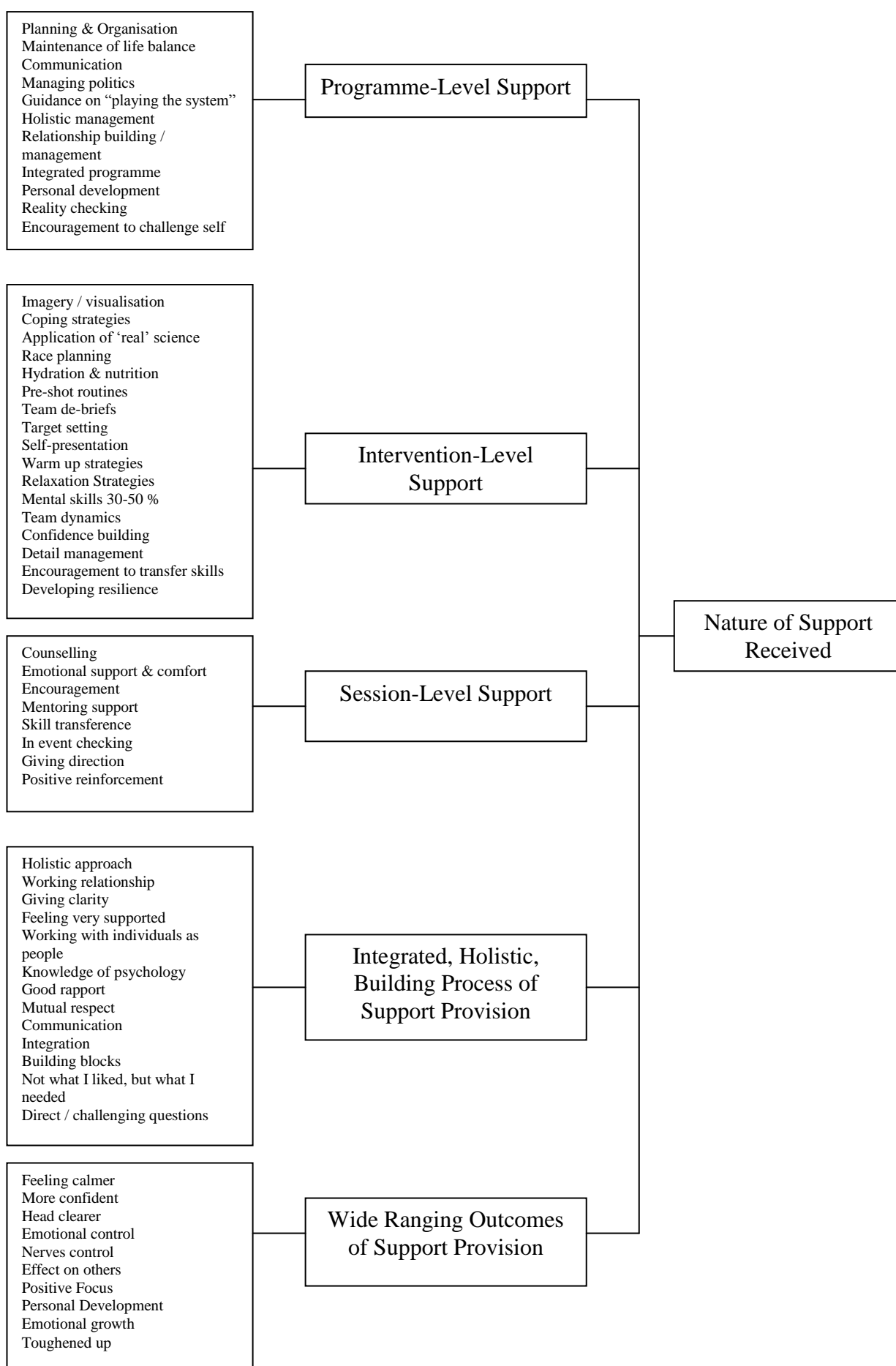
He's now looking out for me on a political level. We discussed that role anyway and I said ... look ahead for me ... will you do that and he said yeah, I'll do that.

...he's a support ... and I think has been just guiding me, making sure that I don't veer off the path, ... making sure that I'm still focusing on a few things ... and ultimately being somebody there for me to sound off my worries to or concerns for that season ... without knowing that he's gonna use that information against me ...

He was like Man Mountain with 10 [athletes] bags, and just... if you miss the bus, organising the taxi or just ... stuff which you wouldn't traditionally put in the sports psychologist's role but ... he saw that as part of the package.

...the over-riding thing with [the psychologist] is he will try and put everything in place to make your life as stress free as possible, so that you can focus on that one thing ...

Figure 6.2. Nature of support received



Whether that's a normal sports psych ... probably not ... it's probably more your coach, probably the role of kind of manager it should be ... unfortunately the sports systems don't deliver those...

Fluctuating level of contact

The athletes reported that the level of contact between them and the psychologist fluctuated over the long-term support and that the quality and impact of the support was more important than the quantity of sessions. The following quotes illustrate this clearly:

...it's quite erratic when I'll actually see him...even if I've got nothing to talk about ... everything's a bonus from [the psychologist] so ... yeah, it's kind of ... been up and down.

...he would come and go from the squad and yeah ... he was there more at certain times than others.

It's kinda come and gone. Throughout that time line, I would say ... him being there and not being there ... has kind of gone ... up and down... That phase was more of a trickle of support but it was ... one of those where it was all quality rather than quantity...

It's probably just reflective of ... how much I got out of it rather than him actually ... being visible ...

Use of knowledge, experience and personal characteristics to instil belief in self, support and process

The athletes reported that the psychologist's unique personality characteristics along with his knowledge and experience applied in an individualised manner helped to instil belief in the support, in the overall process, and ultimately in themselves as the following quotes demonstrate:

... you really can believe what he's saying and trust him and feel like you're really getting somewhere because... he's just got that kind of presence that ... yeah, I know what I'm talking about ... and I know you ... so ... I think that that might be what makes him so good.

...for me, [the psychologist's] the type of person ... there's no middle ground ... when you first meet him, you either like him or you don't like him ... and I've told him that before ... he's like Marmite ...

...it's about personality, it is about the person, there are basic tools that I guess every psychologist would implement initially ... so it's not necessarily about the tools. You'll probably read about that in the book ... it's about how they implement it and how they implement it relevant to you.

...it might even be that somebody with a different personality than [the psychologist] who said exactly the same things ... it wouldn't have worked...and I think a lot of it is sheer respect for him ... if you respect someone that much you kind of take in what they say like it's gospel at the time which I think is quite a vital thing in a lot of ways. Its how much you believe in what you're being told ... as to how you feel about it ...

Holistic, integrated, individualised support encouraging the athletes to question and lead themselves

The athletes reported that the psychologist provided holistic and integrated support and encouraged them to think, question and lead for themselves. This was promoted by posing questions, sowing seeds, and letting the athletes orchestrate the support process:

...he wouldn't tell me the answer straight out... but he would kind of pose questions ... so then I would go away and think about it...

He kind of suggested things and said ... you might want to try and use this and if it doesn't work, then fine but see how it goes, and I found that good because it was kinda like it was my responsibility, which is what I needed ... it wouldn't have been any good for me if someone just kind of spoon-fed things to me ... it ultimately had to be me that wanted to do it and me that wanted to get somewhere...

...why are you doing that? ... have you thought about this? ... consider that, so really questioning what I'm doing more than anything, to pull me back on line. So in other words, he was... letting me lead myself a little bit ... rather than just saying, this is what you should do ... although there were times where he would say, I think this is the best approach...

...this was around the time that [the psychologist] started to use the sowing seeds thing with me ... and initially I wasn't totally aware of what he was doing but then kind of I saw... and he knew that that worked, that I was receptive to that ...

...I suppose I was in the middle kind of ... orchestrating it a little bit ... but [the psychologist] was feeding it...

Supportive climate encouraging change, responsibility and control

Athlete reflections revealed that the psychologist created a supportive and secure climate and within that encouraged the athletes to take responsibility and control and to pursue change for performance enhancement. The following quotes illustrate this position:

I felt that he was somebody that I could relate to, could work with and could be open and honest with, who was always open and honest with me ... and that, for me, was his way of working ... I found him not intimidating in the slightest, very supportive, very professional in his approach...

Being honest and trustworthy ... they were the most useful things... it was that coupled with his knowledge in the area and everything he said made sense. So it was almost ... yeah, that's what I feel ... yeah, bloody hell ... I've found somebody who can ... understand what I'm talking about.

I don't think you would get an athlete who would ever have a bad word to say about him because whatever he does, whether it's in the political arena or within a one to one with the athlete ... it's all for the benefit of the athlete, so he does have respect amongst the athletes that he works with and the ones who are associated with him.

So it was more focusing on the positives I guess was one of the key things I think that he did well.

...it gave me responsibility and I felt like I was in control which I need, I'm a very kind of control freak ...

Promotion of independence and change at a deep processing level

The athletes reported an awareness of being encouraged to be responsible, critical, and to seek enduring development through changes in perception, insight, education, and enlightenment as the following quotes demonstrate:

...he'd sort of ... be encouraging and say ... stick at it, but if it's not for you, it's not for you ... so it wasn't kind of in your face ... do this and it will work for you ...

...it was a hard meeting, but at the same time, it kind of made me realise that I had my own thoughts on things, not necessarily my mum's thoughts on it, and I think that I kind of saw where he was coming from and ... he finished it with I'm here for you ... I'm looking out for you, if you need me, I'm here ... so it was at that point I knew that he was helping me...

...and [the psychologist] telling me that ... you know, it's not as bad as I might think, just ... making me see some light on matters.

...obviously these are the funding issues, so there's a ... there's a bit of a political ... thing going on there as well. You know, open your eyes and be a bit more savvy to what's going on ...

...if I was struggling with something, he would just kind of make a comment ... or say one word ... that kinda sounds a bit naff ... he said one word and then I discovered the whole universe...

Awareness of overall programme operating systems

The athletes reported to be aware that the psychologist was knowledgeable about overall programme operating systems and would seek information or clarification for them regarding selection procedures, logistical arrangements for major events, and coaching support. The following quotes illustrate these points:

...he was helping me make the right decisions about training, trying to sort things out for the season so that I could be on the programme by the end of the season, so that I was in the system ... and then a lot of the problems probably wouldn't be there ... once you're in the system, it's an awful lot easier.

I was aware of the work that was going on with him around making sure everything was alright for us, I was aware of it but didn't know a lot of detail. So it was like ... we're going to the Olympic Games, what's it gonna be like when we're there ... all these sort of things ...

I know that he was keen on supporting my coach in season and who's the other kind of ... well, the main foundation for why I've been doing so well. The consistency, the support, you know, he'd jump in a space or jump in a trench with me, no matter what cos he's not out there for himself. He's not out there to make a name. He's doing it because he wants to help me achieve what I can ... so he was keen on making sure [the coach] was supported as well.

He was trying to put things in place so that the environment was generally better for us... he's dealing with the performers and trying to put everything

in place with them, then he can start to work with the national coach and with him put things in place to just try and make things, more straightforward, i.e. selection ... not that he had an impact on that but, he was trying to say to the coach ... look, this is a simpler way to do it and this will simplify things in terms of stress all round ...

...the other thing that I was aware of him working on was trying to get an idea of what Olympic selection was gonna be like next time ... because we knew it was gonna be changing but we didn't really know what that was gonna look like...

Supportive, encouraging, directive communication and interaction style

The athletes reported the psychologist to be supportive and encouraging to them, but also that his communication and interaction style would be direct. In particular the athletes appreciated not being told what they perhaps wanted to hear, but being told the reality of the situation. The following quotes demonstrate these points:

...kind of informal ... like two relaxed friends ... just really, really caring and, ... just made people very, very comfortable, and just ... knowing what to say to spark something off ... just having enough knowledge to be able to get at the right things... and also often he'd bring his experiences into it as well and often making me feel like I wasn't the only one that was going through that...

I get caught up in the emotions of things and [the psychologist] was always good at telling me how it is rather than perhaps what I want to hear or the emotional side of it.

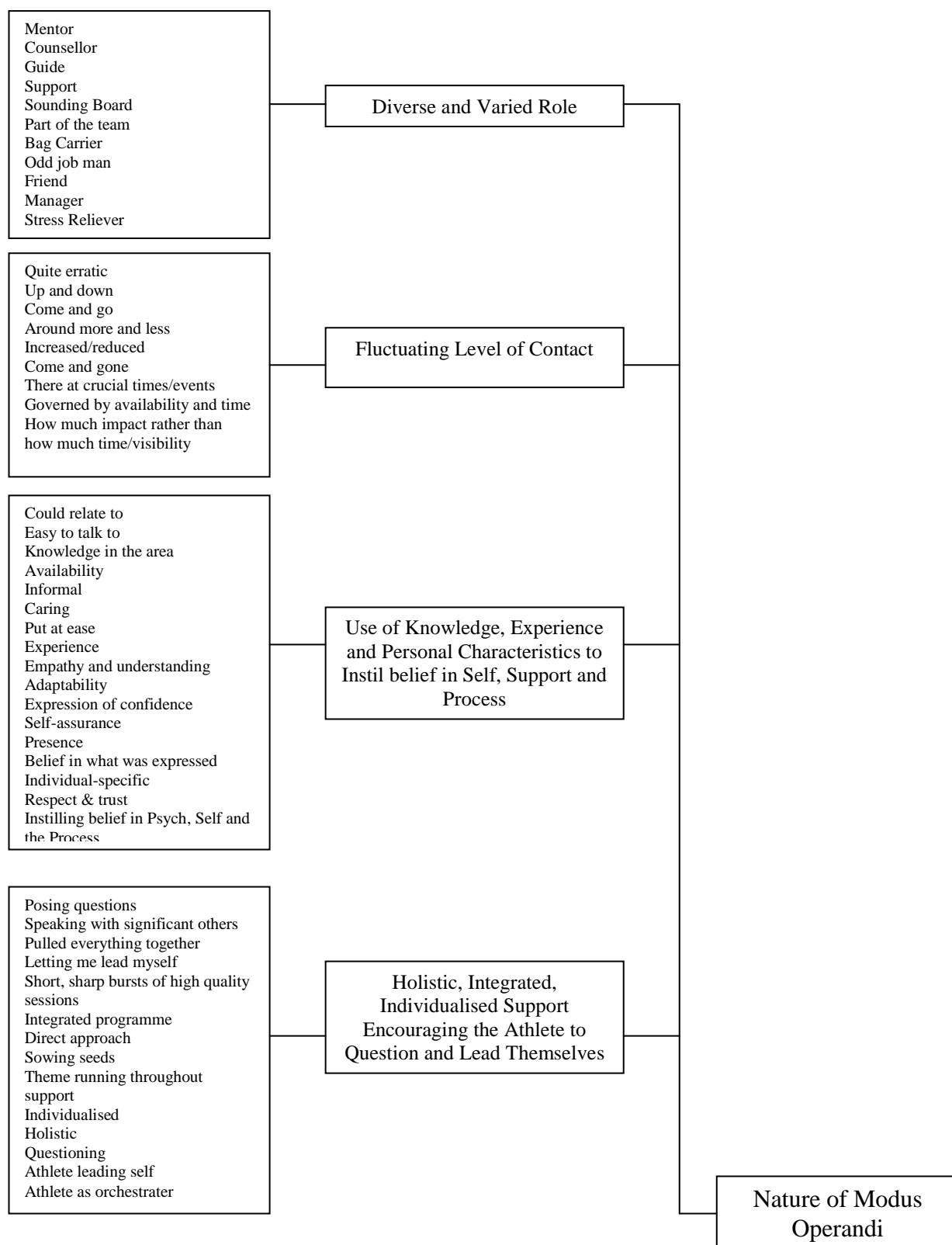
...the way that [the psychologist] has worked predominantly with me is ... if I'm struggling to work something out, he'll make or suggest alternatives and just put one or two things forward ... but knowing that I'll work it out ...

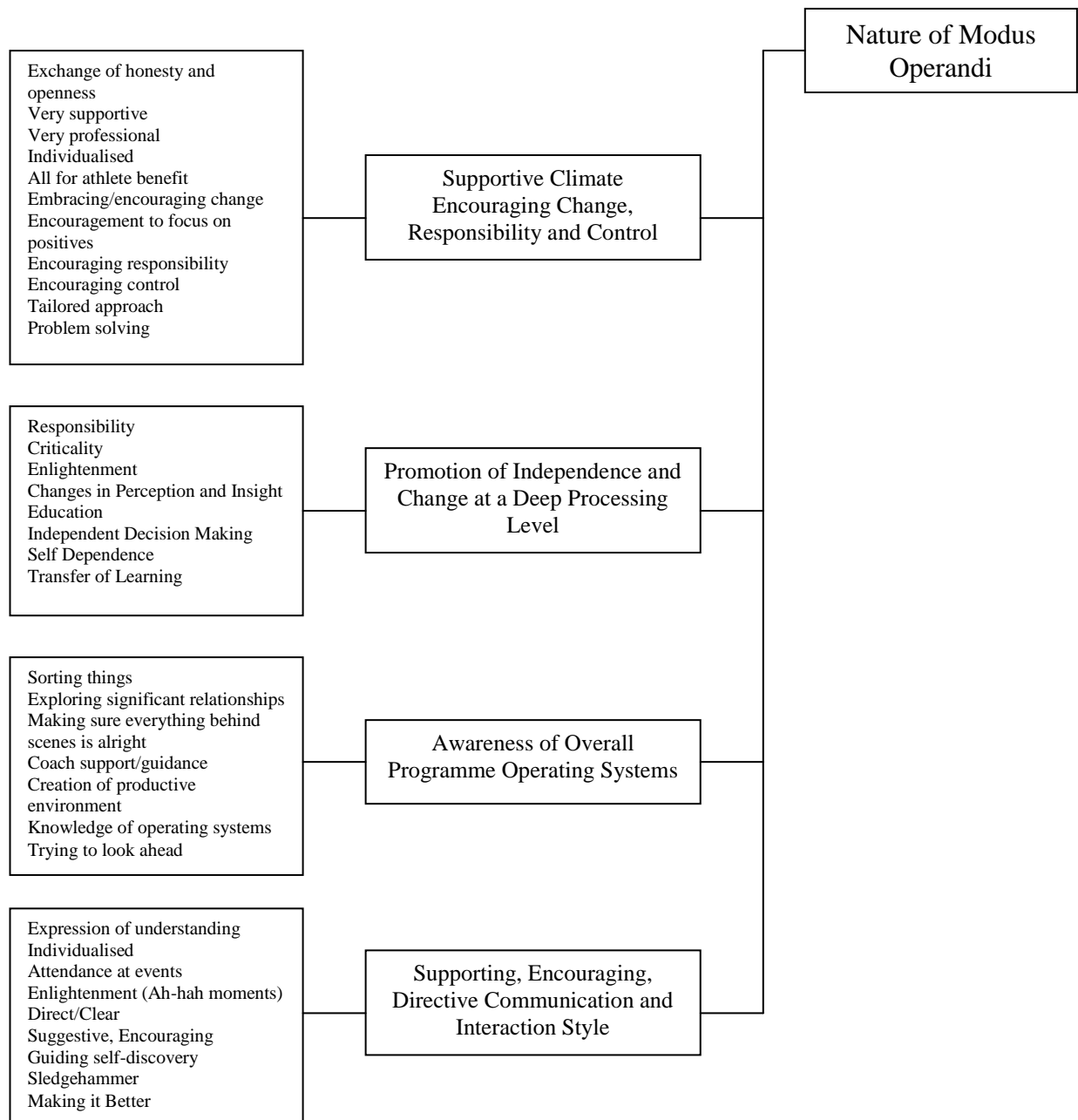
And also the way that he always finishes off with ... OK, this is what we're going to do from now and this is how we're going to make it better ...

...he was just really straight up and straightforward ... he wasn't wishy washy, which I've seen some people ... and he didn't tiptoe around me, which is definitely what I needed, he would tell you how it was...

...always made me feel at ease, always made me feel like ... he was there for me and so if he ever had to say something to me that I didn't want to hear ... I could take it from him because ...I knew that it was in my best interests.

Figure 6.3. Nature of modus operandi





6.3.4 Nature of the Relationship

Diverse and evolving roles

The roles of the psychologist were reported to be diverse including consultant, professional, sounding board, mentor, father figure, and friend. Additionally the athletes highlighted that his role evolved and morphed throughout the support:

...almost like a father figure in a way...

... [the psychologist] supported us ... I guess as a consultant at that stage, as a sounding board of what we were wanting to do ...

...he started to become a bit of a mentor, which is probably the way it naturally goes, you know a natural transition ...

...he is a friend but ... the way that he works is so professional that you couldn't ever say that it was just a kind of a friendship ...

Challenging and directive interaction

The athletes' reflections revealed the nature of interaction to be challenging and directive. The psychologist appeared to have established relationships with the athletes whereby elements of challenge were perceived to be in their best interests:

...he'd give advice if I asked for it, directions that I might take or if I was saying, well I want to do this ..., this would be a good additional thing ... to be an added strength ... he's just always been there to help...

...when he does challenge me, he really challenges me and it might be that that's only once or twice a year.

...just always made me feel at ease, always made me feel like he was there for me and so if he ever had to say something to me that I didn't want to hear ... I could take it from him because I knew that it was in my best interests.

Dynamic and evolving relationship

The athletes reported that their relationship with the psychologist changed over time. This appeared to follow the directive to collaborative approach advocated

in cognitive-behavioural models of practice. The athletes describe this evolution as natural and reflected that the final transition was to that of friend and mentor:

...the way that he was helping me changed ... it's gone from he knows best so this is how we tackle this problem ... to how are we going to cope with the new circumstances ...

...the way that he related to me obviously gradually over time changed...

...it's gone from nothing to full involvement where he's now the lead for myself at the Olympics. He will head that up and pull it all together which will allow me to do what I need to do. So ... it's changed dramatically.

...it changed from ... being obviously new acquaintances to building up the trust in each other ... to know what I could and couldn't speak to him about ... to a point whereby I would say that [the psychologist's] now ... I would class him as a friend as well as what we do and how we deal with each other professionally ... so it's developing that open and honest way ... I would say that's changed definitely for the better ...

It just evolved naturally ... obviously the longer that [the psychologist] worked with me and got to know me as I evolved and developed as an athlete, so did the way that we worked.

Provision of clear, direct, knowledgeable advice in a safe and trusting environment

The athletes reported to appreciate the psychologist's knowledge and that it was expressed in a direct, reasoned way that provided clarity. It was highlighted that this was within a context of trust, openness, honesty, and not being judged, which resulted in the athletes feeling understood, and feeling that what they were being told was right:

...have a belief that his knowledge is right...

I'm comfortable with [the psychologist] and because he makes it an important thing, he'll be like ... well, it's part of your happiness or it's part of the way you feel about yourself and it's gonna affect your [sport], so ... being able to talk about literally anything ... and also know that he'll never judge me ...

...he's able to understand what I'm saying, sometimes it's difficult to just blurt out what you might think the problem is ... sometimes you don't even know specifically but by saying a few things, he knows exactly what it is. Whereas in other experiences, I've felt like I've had to ... explain what my

problem is ... other psychologists, and ... if I was able to do that, then I wouldn't need them...

...his ability to listen and respond in a way that I found ... I could deal with ... It wasn't in a way that was confrontational or anything like that. So he did listen, try to understand and come back with a reasoned sort of answer... The fact that I can say anything to him ... whether it be irrelevant or not ... and him to be honest and say back to me ... that's been good or don't talk shite or whatever ...

...being able to totally open with him I think is something that I just found invaluable for what he's there for me for because ... if I wasn't able to do that, then he wouldn't have been able to address some of the issues ...

He's really good at just knowing what the problem is ... before you've even said anything, which I always found quite amazing ... it was like he knew me so well before I'd even spoken but I imagine it's because there's so many athletes that go through the same thing.

6.3.5 Nature of Impact and Change

Performance development

One of the main ways in which the athletes gauged the impact and change induced by the support work with the psychologist was through performance development (e.g. results, statistics, selection, contention, and others perceptions):

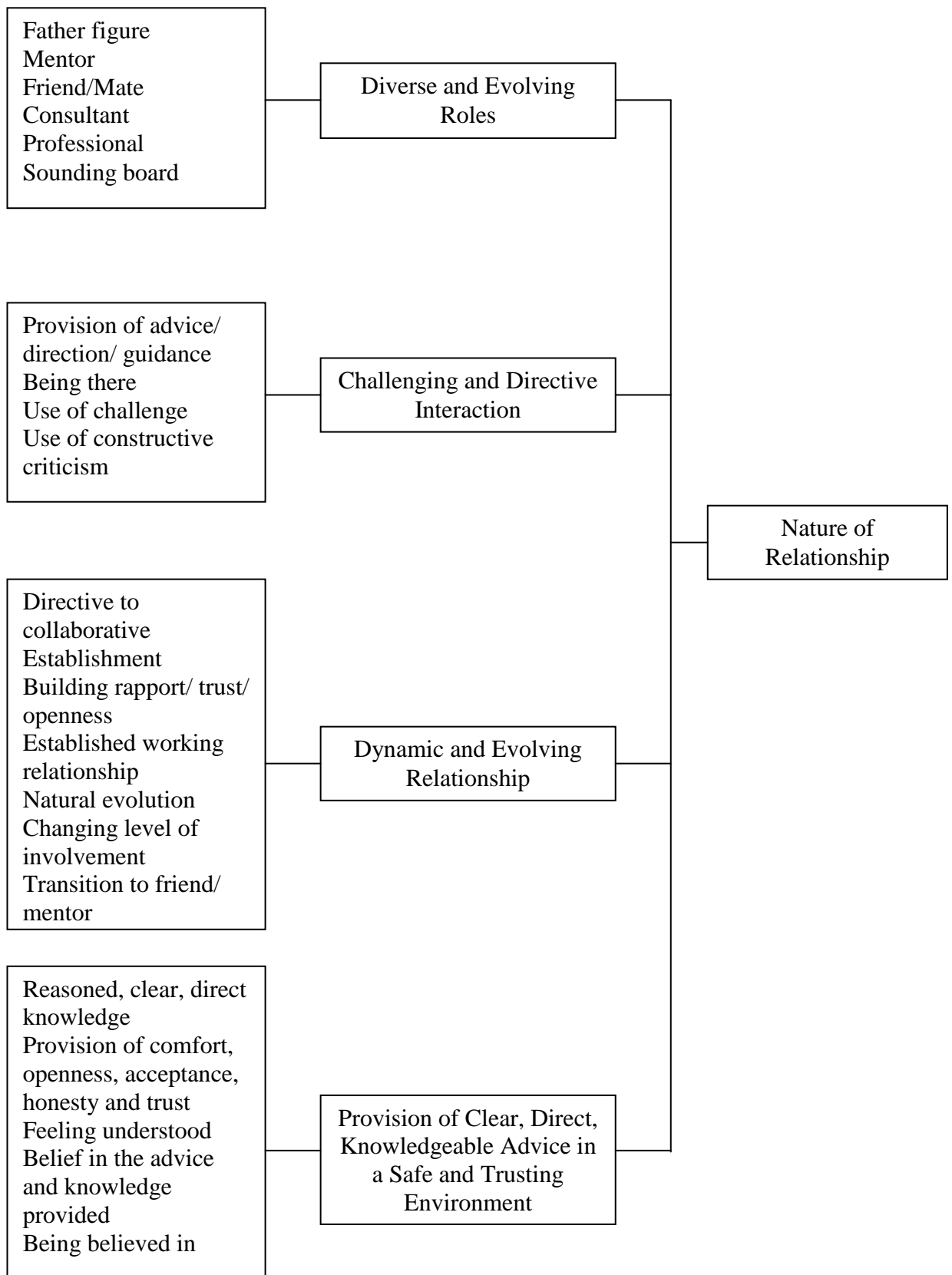
It made a difference to my status ... it made a huge difference to my status... I measured success ... by my performance levels and also ... from how I was being perceived in any different ways by other people ...

I guess the results ... and the feeling when I was racing ... learning whether things worked or not that he told me to do ... and also comments from other people ...

...it was just something inside ... my confidence was growing ... and it was based upon solid foundations and based upon things that were right ... things that made sense to me...

...first and foremost, my performance levels ... and the good thing in [the sport] is you're given performance statistics every time that you play. So you can measure that... and the other gauge I would use would be ... how together we were as a team ...

Figure 6.4. Nature of relationship



Kind of how I'm being ... as opposed to my doing... I would try and analyse how I felt during the game, was there anything I could improve on during the game ... that sort of thing. So it's more about how me as a person was ... so it was the being side of me.

...being invited to a training weekend, feeling like I was going to be considered for the squad rather than being overlooked, something that the head of potential said to me about ... oh, things are working well with the psychologist then, you seem so much happier ...

Personal development

Another way the athletes reported to gauge the impact or change brought about through the support was through personal development (e.g., interaction, communication, confidence, self perception, enhanced insight, understanding, and self regulation). The following quotes demonstrate some of these developments:

Definitely during the session, I'd feel like there was an impact. I think a lot of that is the whole counselling effect of it because, like I said, it was often very emotional because I'm a very emotional person ... and also because you were dealing with quite difficult things.

I know that he's helped me massively, me as a person ...

...the most important thing I think was just how I was feeling about myself ... like my happiness and how much I was enjoying it again...

I know that it's had a huge impact on me as a person, which it continues to do...

...every session I'd walk away with all my questions answered and if they hadn't, they'd be answered shortly ... sometimes I found the answer myself.

...and [the psychologist] telling me that ... you know, it's not as bad as I might think, just ... making me see some light on matters.

...there would be certain meetings where I'd go out and I'd feel better, I'd feel calmer, and it's psychological ... nothing changed physically...

Steady, gradual progression to lasting change

Rather than a series of critical incidents, the athletes reported a gradual build up and steady progression of performance, which gave rise to lasting and lifelong effects:

...when things are going smoothly, training's going smoothly and there's a general gradual build-up ... the momentum's going, it seems to align your thinking and align your mind set to the conclusion that things are going nice and smoothly.

I think it was just steady progression of good results ... there was nothing ... you know, extraordinary in terms of ... the likes of world cups or anything. It was more ... good, steady turnover performances ... confidence was growing, there was learning ...

...the stuff about me ... and changing me as a person, it was a real gradual thing...

I think that what he does set is something that's lifelong as well and ... things that I need to work on are things that will always need to work on they're quite lasting.

I guess that's one thing that's quite significant actually ... the amount of things that ... I now feel I can do ... that I learnt from [the psychologist], and things that just carry on and on and on ... how you react to a situation, I've now learnt to deal with it in different ways...

Wide ranging change outputs

Athletes reported the outcomes from the support to be wide-ranging changes that enabled them to make decisions and plan for the future, mature, develop communication and interpersonal skills, make them think, be self-sufficient, and transfer skills learnt to domains outside of sport:

I think it made me realise that I've either got to put everything into it and it might not work out or I go somewhere else or I give up ... and I don't want to give up ... so it's definitely made me realise that I can't just carry on anymore.

I'd had a meeting with her where I'd been very, very aggressive and then having a meeting with her and managing to be very calm and grown up about it...

...quality sessions that made me think and I think empowering an athlete to think is really a very powerful thing, isn't it?

...there are things that I could do for myself. I guess that's one thing that's quite significant actually ... the amount of things that ... I now feel I can do ... that I learnt from [the psychologist]...

I think if your athlete's capable of thinking logically, then you open up a new level of performance.

Sometimes you'll forget little things but ... most of the time, those things would stay with me ... even when I stopped [the sport] and I started to use these things outside of skating as well ...

6.3.6 Nature of Other Influential Factors

The athletes' highlighted a number of additional factors that were influential in the effectiveness of the support. As the following quotes demonstrate these included funding, conflicting priorities, the status and experience of the provider, individualised service, and getting to choose the provider that they wanted to work with. Additional reflections comparing this service to previous support received were also offered:

Funding

Funding ... I guess impacted the levels of support that we received from [the psychologist] ... quite naturally ...the level of funding available for us.

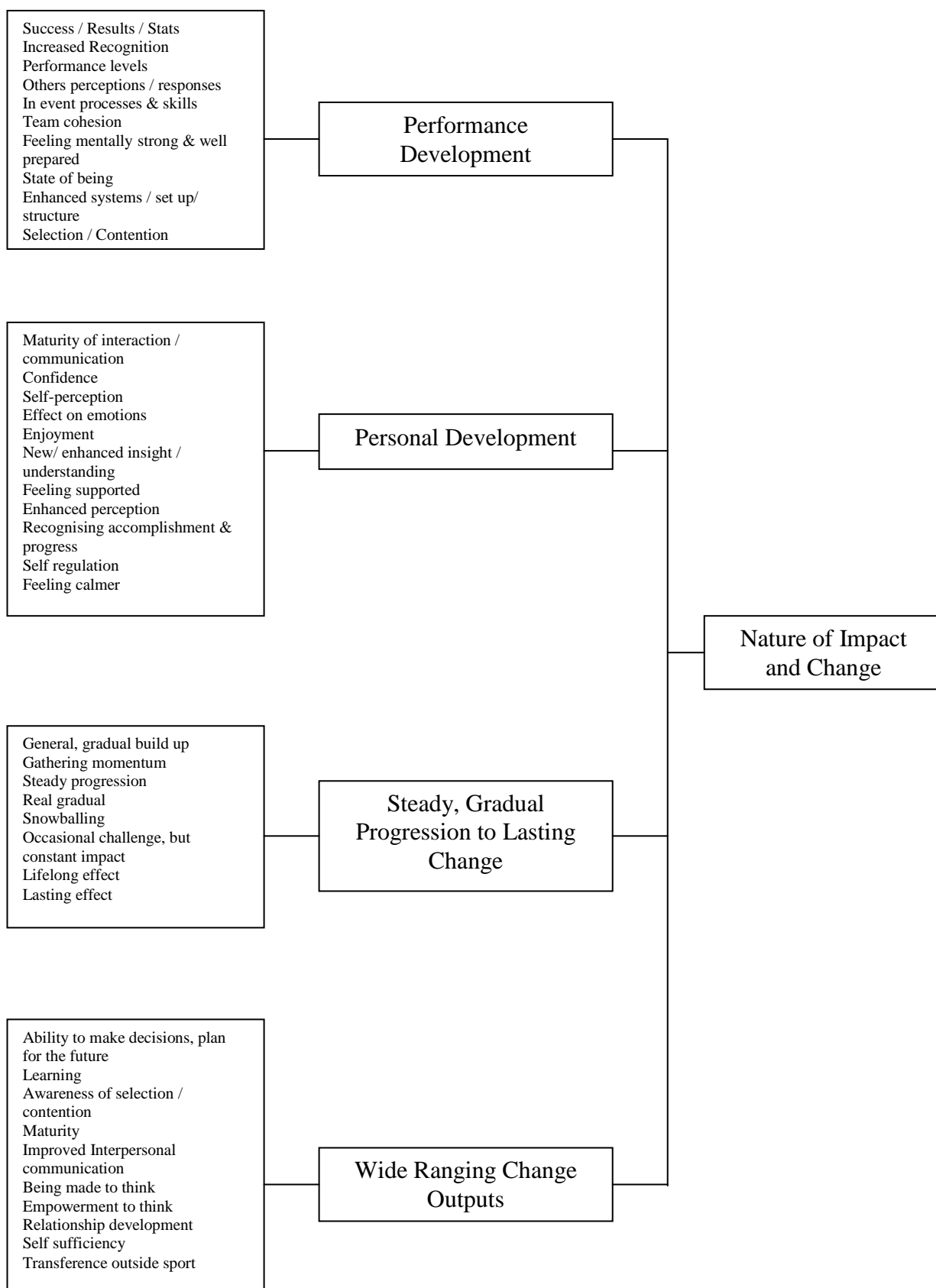
Conflicting priorities (availability and workload)

I guess conflicting priorities for him ...what else [the psychologist's] got ... his workload more than anything else ...

Status/experience of provider

... his status ... I think that probably does [impact] as well ... although to begin with I didn't really know how good he was ... and in some ways I think especially to begin with ... I was a bit wary of using him because I felt like was I worthy of it ... he's worked with all these major athletes, why would he want to work with me? But he's always making me feel like I was worth something ...

Figure 6.5. Nature of impact and change



I get a certain confidence out of ... knowing that I've worked with him, so automatically that makes me really ... mentally strong and well prepared ...

Individualised service – dealing with psychology of the person and the performer

...if you've got the wrong information, then it's very, very dangerous. So your elite level athletes and your elite level psychologists... doctors, engineers ... some are really good and some are naff so there's a whole spectrum and top sportsmen need a top sports psychologist not just a generic service that's giving out ... a blanket service...

I will still question him but ... I'll accept what he's saying whereas before I'd be always fearful about what people were saying because it was always general technical delivery ... which does nobody any good ... it can send you backwards.

So, I was really frustrated by the amount of and level or lack of understanding that professionals in sport have and I'm continually frustrated by that. There are not that many good people out there that really understand everything... I'd say ... this is my problem ... and they'd ... pigeon hole it...

Totally missing the psychology out of it, just dealing with the person. You're not dealing with a sports person or a sport ... you're dealing with a person and so ... even though their life is their sport, there's gonna be all these other things that are gonna impact that, that they never really take on board ...

Getting/ choosing a provider you connect with and want to work with

... one of our guys in the team had a bit of a bad experience for previous Olympic selection ... so there was some sort of preconceptions ... I'm the type of individual that thinks if you've got the right person to work with, then they can bring an extra 1 or 2 percent and you need to go with that and you need to be open...

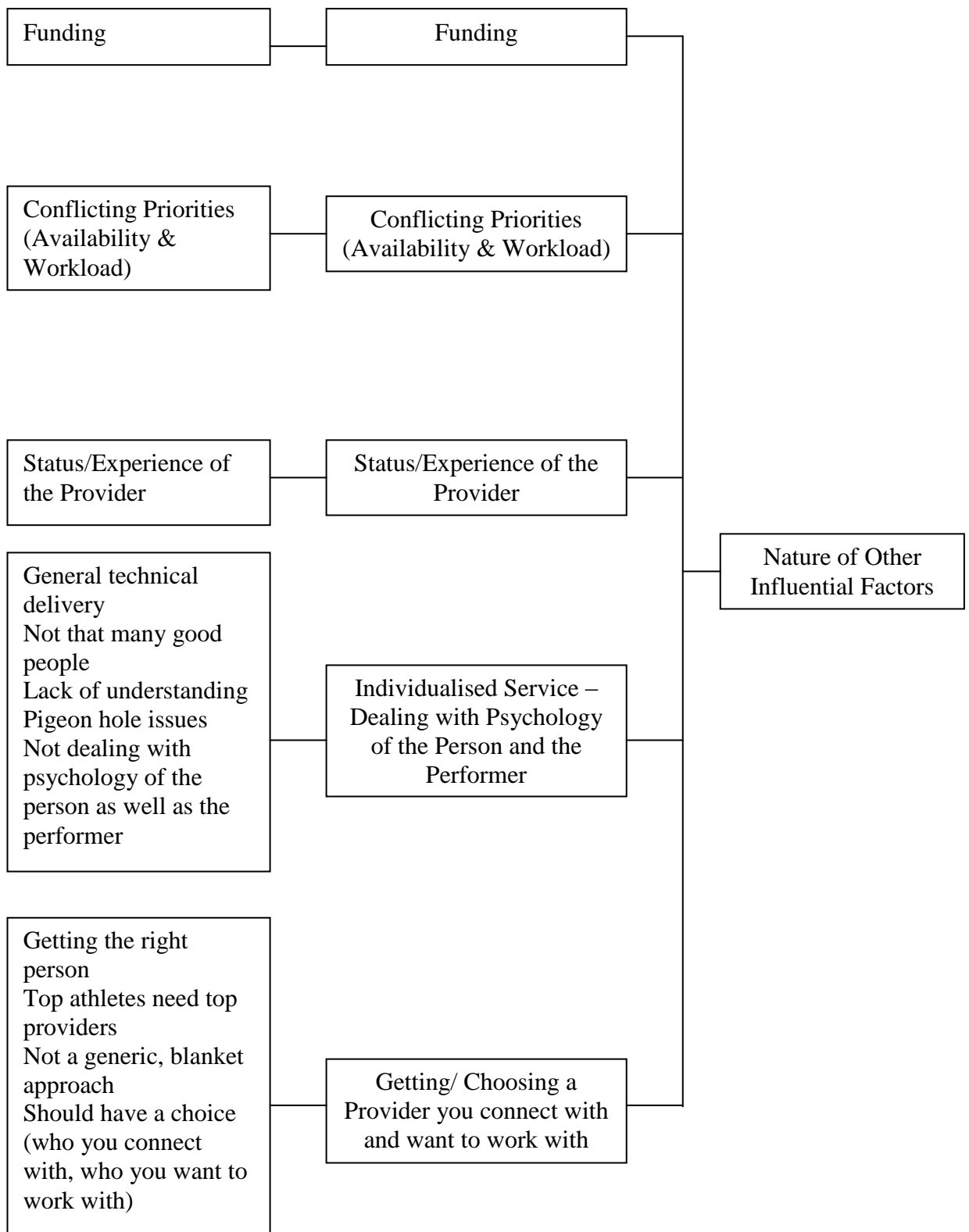
And I think you should have a choice from a psychological point of view ... who you connect with and who you want to work with cos we've all got different issues...

6.4 General Discussion

6.4.1 Key Messages

The results obtained from these interviews provide a unique insight into the nature and complexity of effective long-term sport psychology consultancy, and in

Figure 6.6. Nature of other influential factors



particular, what was considered by the athletes to create impact and to be effective in practice. As such, the data collected in this chapter contributes directly to the overall purpose of the thesis in terms of establishing what we can learn from effective consultancy in order to enhance practitioner performance and develop PJDM expertise. A complete summary of the emerging themes is displayed in Figure 6.7. As in Chapter 5, this figure represents the cycle of assessment, deployment and refinement in applied sport psychology practice with the nature of *modus operandi* and the nature of the relationship at its core. A huge amount of data were generated from these interviews, however after careful consideration of the thematic analysis, certain overall messages are apparent and these are now discussed in turn:

Firstly, the practitioner appears to be operating as an “agent of change” (e.g., goals are used for planning and direction, the support received is re-enforced at multiple levels, change is actively encouraged and promoted, challenge is used to direct and guide behaviour, and lasting behaviour change is sought). This emphasis could be led by the practitioner’s theoretical orientation, professional philosophy, personal characteristics, judgment about what is required and effective, and indeed any combination of these factors and others. The main message here however, is that the athletes reported that this promotion of change took place within a safe and trusting environment and that they found it helpful and effective, if not always what they wanted.

Interestingly, this approach to change is consistent with Kremer and Scully’s (1998) suggestions regarding empowerment and self-sufficiency. Practitioners who work with clients over extended periods of time have previously received criticism regarding the dependency that this may induce. However, this feedback from athletes

suggests that responsibility, control, and empowerment can be promoted within long-term consultancy. For example, by using collaborative goal setting, encouraging athletes to question and lead themselves, and by promoting skill transference and independence. This agenda is reflected in the nature of the modus operandi through fluctuating levels of contact, for example, and in the nature of the relationship, which can evolve to be less directive and more collaborative as it matures.

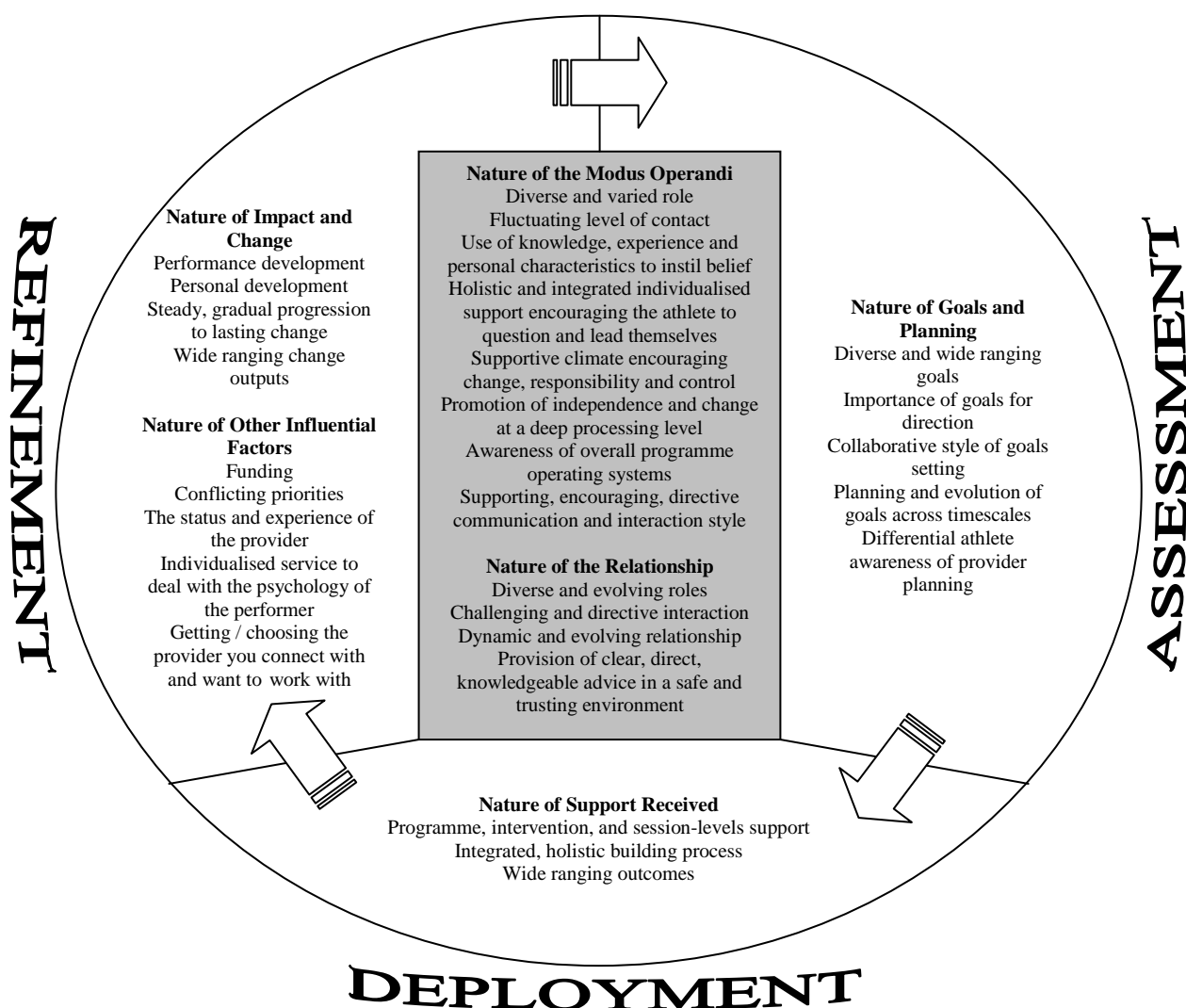


Figure 6.7. Summary of thematic analysis for athlete reflections on long-term sport psychology support

Of course, not all support situations lend themselves to long-term consultancy and it may be that while this is an opportunity for ongoing and continued change at a deep processing level (Entwistle & Waterston, 1988), brief contact interventions (Giges & Petitpas, 2000) can provide a more immediate (and perhaps therefore surface) approach to change, which may be exactly what the athlete and or coach is looking for.

A second overall message concerns the scope of interventions that are implemented over extended periods of time. It is apparent that the support agenda evolves, intensifies, and reduces in cycles throughout, not unlike those described in coach-athlete relationships (e.g., Wilmot, 1975). It also appears as though support can be implemented at multiple levels identified as session, intervention, and programme. This means the practitioner can promote the skills, techniques, or behaviours to be developed at more immediate, intermediate, or long-term levels depending on the context of support at a specific time. This approach is again reflected in the nature of practitioner contact which was reported to wax and wane across time. Of note here is that the athletes did not report the influence or impact of the practitioner to wane along with the contact, suggesting that the practitioner can encourage the client to promote or re-enforce areas for development in absentia.

The insight gained from athletes regarding long-term consultancy reveals some implications for practice, evaluation and training. For example, it is apparent that relationship management, nested planning, and subtlety in pursuit of goals are skills which the practitioner employs in these types of circumstance. These examples of consultancy skills are not given a great deal of exposure in professional training

and education; for example, they do not feature in the BASES Supervised Experience competencies (BASES, 2007).

6.4.2 Practitioner –Athlete Perspectives: Similarities and Differences

There are some interesting similarities and differences between the athletes' and psychologist's perspectives on the support received and provided. For example, the athletes reported that planning and evolution of goals across timescales took place, which is in accordance with the psychologist's provision of multi-level, nested and hierarchical planning; however the extent to which athletes were aware of this provider planning was varied. The athletes reported to be aware of an integrated, holistic building process which is in accordance with the provider's reporting of a gradual layering of support across programme, intervention, and session levels. Additionally, while mental skills training was provided, this was not regarded by either party to be the key to successful support. Rather, an emphasis on creating a supportive climate to encourage change was highlighted by the athletes, which directly complements the psychologist's intention to create the best performance situation for the athletes.

A final revelation is that the athletes reported the provider's directive communication and interaction style to be supportive and encouraging (rather than to the contrary as many would expect) and to be influential in encouraging change, responsibility and control. This *modus operandi* appears to have been particularly successful due to the athletes' appreciation of the provider's knowledge and due to the psychologist's creation of a safe and trusting environment.

This style carries implications for the compatibility of the reported provider characteristics and practices with current formal evaluation procedures. For example, it has previously been noted that generic assessment instruments, such as the Consultant Evaluation Form (CEF) (Partington & Orlick, 1987) and the Assessment of Consultant Effectiveness (ACE) instrument (Anderson, 2002) are heavily weighted toward assessing the characteristics displayed by the practitioner and whether these were considered favourable by the client in the short term (see Chapters 2 and 3). Findings from the studies in Chapters 5 and 6 however would suggest that characteristics displayed by the psychologist may be considered unfavourable by athletes in the short-term, but favourable on reflection across a longer time scale.

6.4.3 Limitations and Delimitations

A number of limitations and delimitations should be highlighted regarding the study design used in Chapters 5 & 6, for example the practitioner operated within the bounds of the Cognitive-Behavioural orientation and, as such, the nature of the relationship and modus operandi are specific to this paradigm and to this individual. As such, it is not suggested that these methods and approaches would be suitable for all individuals working in long-term consultancy; however, it is hoped that the material uncovered may provide some food for thought and debate for practitioners operating across the full spectrum of orientations. Additionally, the numbers used to generate this data are relatively small and further exploration of the perspectives of more athletes would add to the breadth of this data. The number of individuals who have received long-term support from the same practitioner, however, reduces the

availability of potential subjects. Another limitation which should be explored is the use of retrospective recall, for example, some athletes were recalling information from as long ago as 10 years and some questions could be raised about the likely accuracy of this. While the participants were encouraged to review training logs and diaries prior to the interview and were aided by drawing a timeline of their support to jog memory, it is widely reported that recall deteriorates with time. It is possible, however, that such significant life events (e.g., competing at the Olympic Games) could serve as anchors in memory or “flashbulbs” (Brown & Kulik, 1977).

6.4.4 Where Next?

The next chapter will review what has been learned in the thesis so far by providing a summary of the main messages from chapters 2 – 6. Further theoretical underpinning will be offered to assist with the interpretation of these findings and to provide direction for the final two chapters of the thesis.

Chapter 7. The Story So Far: What Learned and Where Next?

7.1 Introduction

The aims of this chapter are to: provide a resume of the thesis so far, recap the principles and implications for practice which have emerged, lock these into a theoretical backdrop to explain how they may work, and outline the rationale for the final two studies of the thesis. In short, the intention is to discuss what has been learned so far, consider what is worth exploring in more depth and provide direction for the remainder of the thesis.

7.2 Resume of the Thesis So Far

7.2.1 Critical Review of Literature

A central consideration which emerged from the Critical Review of Literature was the potential for ‘evaluation’ to act as a “window” to effective practice (i.e., to indicate what factors practitioners consider to have made an impact or difference, whilst also offering some indication as to the degree of this influence). As such, ‘how’ and ‘what’ we are currently evaluating in practice, and the balance of influence they may exert, were explored in some depth, and summaries of the associated implications are provided below.

How Are We Evaluating? A Summary

The overview of current ‘formal’ evaluation procedures suggested that they were not capturing all the intricacies and complexities of applied sport psychology practice nor of the evolving evaluation climate. Specifically, it was suggested that

standardised forms, used so widely as a measure of client evaluation, are inherently biased toward assessing specific consultant characteristics which have been uncritically accepted as indicators of effectiveness following their identification by clients (against somewhat different criteria) almost two decades ago. In addition, standardised forms do not accommodate practitioner-specific intentions (e.g. short term pain for longer term gains) or inherently allow for the possibility of targeted developments outside the area of mental skills training, which may emerge over a period of time.

The other common and current evaluation tool, case studies, can provide a peer evaluation of interventions but traditionally provide little insight into the professional decision making undertaken by the practitioner. Finally, while reflective practice represents a developing form of self-evaluation, it has yet to fully utilise the concept of the practitioner as a decision maker, due in part to the absence of common vocabulary and to the lack of established criteria against which to reflect.

This brief overview of existing formal methods of evaluation illustrated that some practice gaps do exist but that there is scope to build on these existing methods. As such, a framework using literature and research in PJDM was proposed to offer some methods and mechanisms by which to enhance the evaluation of our practice.

What Are We Evaluating? A Summary

The identification of effectiveness indicators by Anderson et al. (2002) has provided a platform from which to build. However, Chapter 2 demonstrated that the current indicators, whilst important, do not capture the full array of constructs on which the practitioner may impact, nor do they evaluate the breadth and depth of

increasingly varied practice. This carries important implications for how comprehensively we are evaluating applied sport psychology practice and subsequently, for how effectively we can justify or optimise its impact.

Crucially, significant gains in the enhancement of evaluation in applied sport psychology could be made through the expansion of integrated process and outcome measures. In this regard, while the role of practitioner decision making is increasingly recognised in the literature, it is not currently a central feature of process evaluation. Of particular relevance here is the recognition that evidence-based practice is important for “allowing sport psychologists to make informed decisions regarding the most effective interventions” (Gardner & Moore, 2006, p. 67).

Additionally, there is room for improvement in the ways in which outcome measures are used in practice. A poorly designed outcome measure can easily do more harm than good; Eddy’s (1998) proposed solution is to focus more on process measures. Importantly, outcome information is somewhat empty without sufficient process detail to indicate what the practitioner was attempting to achieve with the individual client at that particular time, in what way (against what other considered but dismissed options), and for what specific purpose (i.e., practitioner-specific judgment, decision making and intentions for impact). This vital information would also allow more considered evaluations of associated outcome measures and therefore of our overall effectiveness as consultants.

Chapter 2 demonstrated a need to establish clearer guidelines for the content of evaluation (through the development of integrated process and outcome measures) and a need to extend this clarity to evaluation methods and mechanisms, while still maintaining the flexibility necessary to accommodate consultation context and

individual specific practice. Chapter 3 addressed the content of these decisions; the knowledge bases accessed in their formation, and how issue conceptualisation could be utilised to enhance the evaluation and development of process effectiveness in applied sport psychology.

7.2.2 PJDM Research

Extending this backdrop, the focussed review presented in Chapter 3 explored the nature of decision content in applied sport psychology with a particular focus on the ‘nature of the goal’ and the ‘nature of the relationship’ to illustrate the complexity involved. Thus, key primary decisions were shown to initiate a chain of subsequent decisions in order for practice to remain coherent. Subsequently, ‘intention for impact’ (Hill, 1992) was introduced as a concept, imported from counselling psychology, to help us navigate through the complexity involved in decision content.

In addition, implications were identified for evaluation, reflective practice, and professional development and training; however, the main implication for future research was the need to collect empirical data. Specifically, data were required to support or question the various contentions (thus far made at a conceptual level) regarding the importance of PJDM. Prior to data collection it was important to establish a sound rationale for the methodology to be employed.

7.2.3 Research Methodology – Issues Surrounding the Approaches Used

A predominantly qualitative methodology was selected to ‘illuminate’, ‘provide rich description’, and ‘explore understandings’ (e.g., Patton, 2002). The

constructivist paradigm was adopted and a range of data collection methods employed, including interviews and a reflection-in-action case study. While these methods can offer a ‘rich picture’ however, there are several associated limitations; for example, the sample sizes in Chapters 5 (1 practitioner) and 6 (4 athletes) are small and while this ‘purposeful’ selection provided in-depth insight there may be concern over the extent to which results can be generalised. It may be that the concept of “user-generalisability” can appease some concerns here; this is the suggestion that one form of generalisability lies in others’ ability to take something from the data to use in their own practice (Peshkin, 1993). Certainly, this philosophy is inherent in the many “what experts do” papers and books which characterise the area (Fifer et al., 2008, Martindale & Collins, 2010). Nonetheless, the benefits in terms of ‘rich data’ arising from the use of a largely narrow and deep qualitative analysis of this topic were considered to outweigh the costs associated with generalising these findings to others.

7.2.4 Practitioner Reflections on Long-Term Support Programmes

Semi-structured interviews were utilised in Chapters 5 and 6 to provide empirical illumination to the complexity of applied sport psychology practice. As such, the intention was to capture central themes related to effective, long-term support and, in particular, the evolution of key variables including the nature of the goal, support, relationship, and impact. In addition, interviews with the practitioner had a particular focus on the PJDM utilised throughout the support programs.

In summary, the principles which emerged from practitioner reflections on effective sport psychology support are listed below:

- **Extensive use of professional judgment and decision making –**
 - Use of theoretical orientation as a ‘lens’ through which to examine issues and drive practice (including the complexity of issue conceptualisation, the formation of agendas and intentions, and the depth of nested planning for delivery).
- **A strong emphasis on planning and gradual layering of support –**
 - Attempt to impact at a deep processing level for lasting change (including the encouragement of control, independence, confidence, and self-awareness; promotion of knowledge/skill retention and transfer; and subtlety in pursuit of goals).
- **Use of an element of challenge –**
 - Operating as an “agent of change” to move performers toward their long-term goals (following the creation of a safe and trusting environment).
- **Evolving working relationships –**
 - Initially directive in nature becoming more collaborative to reflect the “therapeutic environment” of CBT orientations (including relationship management and fluctuating levels of contact throughout the support).

Notably, these findings offer an evidence based extension to guidelines already synthesised from the literature based review. Implications for evaluation included consideration of the timescales for impact and the need to place more emphasis on the process of support. Whilst an implication for training is to encourage the development of skills practitioners may need to manage long-term consultation relationships.

7.2.5 Athlete Reflections on Long-Term Support Programmes

In summary, the principles which emerged from the athletes' reflections on effective long-term support are listed below:

- **The practitioner acting as an “agent of change”**
 - Including the use of goals for planning and direction, re-enforcement at multiple levels of support, encouragement and promotion of lasting behaviour change, and the use of challenge within a safe and trusting environment to direct and guide behaviour.
- **The promotion of empowerment and self-sufficiency**
 - Including the use of collaborative goal setting, encouragement of athletes to question and lead themselves, and promotion of skill transference and independence.
- **The multi-layered scope of interventions that are implemented over extended periods of time**
 - Including the support agenda evolving, intensifying, and reducing in cycles; and support / skill development being implemented at session, intervention, and programme levels.

Implications for training included the need to develop skills for relationship management, nested planning, and subtlety in pursuit of goals. Whilst an implication for evaluation was that certain characteristics found helpful by the athlete (e.g., use of challenge) are not considered in current evaluation procedures.

7.3 Further Theoretical Underpinning

To follow on from the principles that emerged from the focussed review and in-depth qualitative interviews, and to tease out well grounded features for optimising professional preparation and practice, it is necessary to return once again to the existing literature and consider which areas may provide the necessary theoretical explanation, underpinning and direction. Three areas of literature are particularly relevant to consider at this stage in the thesis: the concept of “reflection-in-action” (Schön; 1991), the integration of ‘intuitive’ (or naturalistic) decision making (e.g., Montgomery, Lipshitz & Brehmer, 2005) with more ‘analytical’ (or traditional) judgment and decision making models (e.g., Cognitive Continuum Theory; Hamm, 1988), and the development of judgment and decision making expertise. Each will now be considered in turn.

7.3.1. *Reflection-in-Action (Schön, 1991)*

The process of “reflection-in-action” was pioneered by Schön (1991) to provide insight into how professionals *think* in action. As such, it is considered to be key in explaining the mechanisms behind PJDM and is therefore explored here in relation to the principles and implications that have emerged so far in the thesis.

Schön (1991) refers to problem setting or “framing” as a key concept in reflection-in-action. This is a process by which practitioners set the boundaries of attention and impose a coherence on the situation (i.e., to frame the context). Schön (1991) states that: “it is through the process of framing the problematic situation that we may organise and clarify both the ends to be achieved and the possible means of achieving them” (p. 41). This notion of ‘framing’ appears to complement the

concepts of issue conceptualisation (Poczwadowski et al, 1998) and intentions for impact (Hill, 1992) presented in Chapter 3. Furthermore, the “ends to be achieved” could parallel the “nature of the goal” whilst the “possible means of achieving them,” seem congruent with the “nature of the relationship” (See Chapter 3).

The practitioner then attempts to adapt the situation to the frame through a series of moves, discovered consequences, implications, appreciations, and further moves. However these moves can also produce unintended changes which give the situation new meaning. Thus, there is an ongoing process of framing and re-framing the situation in an attempt to understand and ultimately to change it. This process is accompanied by reflection on how the situation is “talking back” to the practitioner (i.e., new meanings may lead to new re-framing). As such, the practitioner evaluates their experiment in reframing the situation on their perception of coherence, congruence, and the ability to keep the inquiry moving (Schön, 1991). This suggestion, that the practitioner understands the situation by trying to change it and considers the resulting changes as the essence of success, complements the principle which emerged in Chapter 5 as the practitioner acting as an “agent of change”. Coincidentally, it also fits well with other more naturalistic concepts such as perception-action coupling.

Another key concept in Schön’s work on reflection-in-action is the idea of on-the-spot experimentation (i.e., “nested within the larger problem-setting experiment, there are also local experiments of various sorts”, p. 141). These can be exploratory experiments, move-testing experiments, or hypothesis-testing experiments. Both move-testing and hypothesis experimenting involve taking action in order to produce an intended change and, as such, can be affirmed/confirmed or

negated/disconfirmed. Thus, Schön (1991) suggests that the inquirer who reflects-in-action “plays a game” with the situation by utilising these three types of experimentation and that their primary interest is in changing the situation for the better, a further concept which complements the principle which emerged in Chapter 5 of the practitioner acting as an “agent of change”.

The effective application of these concepts develops the practitioner’s “stance toward inquiry” (i.e., their attitude toward the reality with which they deal). It is suggested that at the same time as the inquirer tries to shape the situation to their frame, they must be open to the situation’s back-talk. Thus, in reflective conversation, the practitioner must be willing to adopt a kind of double vision to increase their chances of arriving at a deeper and broader coherence of artefact and idea (Schön, 1991). Furthermore, Schön (1991) suggests that when someone reflects-in-action, they become ‘a researcher in the practice context’ (p.68) and this idea complements the message running throughout this thesis that practitioners can be (and should be) more aware of how their thought processes and decision making is guided by their theoretical orientation.

These reflection-in-action concepts appear to complement the principles of effective practice which emerged from the interviews conducted in Chapters 5 and 6, together with the theoretical backdrop offered in the earlier chapters. As such, the case study presented in the Chapter 8 attempted to provide a vehicle to exemplify these concepts, illustrate the application of the emergent principles from Chapter 5 and 6, and capture the deeper and broader coherence described above by Schön. Much of the reflective practice literature in applied sport psychology to date has not considered the use of ‘reflection-in-action’ as a way of representing and

understanding how professionals think *in action*. As such, attention to this critically important branch of reflective practice is long overdue.

7.3.2. Intuitive or Analytical: What Type of Thinking is used in Applied Sport Psychology Decision Making?

It has been demonstrated throughout this thesis that effective practice relies on the careful consideration of professional knowledge, practitioner orientation, presenting cues, client needs, situational context, relationships and goals, amongst other factors. Indeed, the role of analytical thinking is generally accepted as a central feature of the ‘helping professions’ (e.g., Egan, 2002). However, before it is possible to answer the question above with clarity; it is necessary to explore the concept of ‘intuition’ in more depth, particularly as this type of thinking has received a considerable amount of ‘bad press’ from traditional judgment and decision making theorists over the years (e.g., Tversky & Kahneman, 1971). In this regard, it is useful to consider the important distinction between different ‘types’ of intuitive thinking as suggested by Naturalistic Decision Making (NDM) and the more traditional Heuristics and Biases (HB) approaches (Kahneman & Klein, 2009). NDM research explores intuitive judgments that arise from experience and manifest skill (for example, through use of a Recognition-Primed Decision (RPD) strategy; Klein, Calderwood and Clinton-Cirocco, 1986; see Figure 7.1) whilst, in contrast, HB research has been concerned with intuitive judgments that arise from simplifying heuristics, which are therefore less likely to be accurate and more prone to systematic biases (Kahneman & Klein, 2009). As further clarification, Simon (1992) provided a concise definition of skilled intuition, which helps to ‘demystify’ intuition as an

intangible or irrational process: “The situation has provided a cue: This cue has given the expert access to information stored in memory, and the information provides the answer. Intuition is nothing more and nothing less than recognition” (p. 155).

Thus, it seems as though *both* intuitive and analytical types of thinking are necessary in applying sport psychology. This becomes more obvious when considering the timescales over which the practitioner may operate. For example, work at a programme or intervention level which involves considerable planning and design clearly falls into the realm of analytical thinking. In contrast, working at the session level where the practitioner is required to respond almost immediately to clients’ needs, concerns and feedback could more typically be classified as intuitive (albeit skilled) thinking. Therefore, the PJDM that practitioners are required to carry out on a day to day basis is likely to involve the integration of these apparently contradictory approaches. Klein (2009) refers to this as a “blending” of systematic analysis and intuition and suggests that the RPD strategy (see Figure 7.1) may combine intuition with analysis (the pattern matching is the intuitive part, and the mental simulation the deliberate analysis). Whether this alliance is a “marriage of convenience”, there seems to be logic to the integration of NDM and analytical thinking.

The ‘connection’ between analysis and intuition has also been independently described in the literature through dual-processing accounts (e.g., Evans, 2008). In such approaches, System 1 is generally considered to be unconscious, automatic and rapid (characteristics associated with intuitive judgments - NDM) while System 2 is considered to involve controlled, systematic and slow thinking (associated with deliberate or analytic decision making). Despite this ‘superficially attractive’ ‘black

and white' representation of cognition, however, Evans (2008) claims that it is entirely possible that one system operates with 'type 1' processes and that the other includes a mixture of 'type 1' and 'type 2' processes. Independent of the more structurally based arguments which underpin Evans' work, this contention further supports the idea of a 'blending' or 'synthesis' of intuitive and analytical decision making in applied practice.

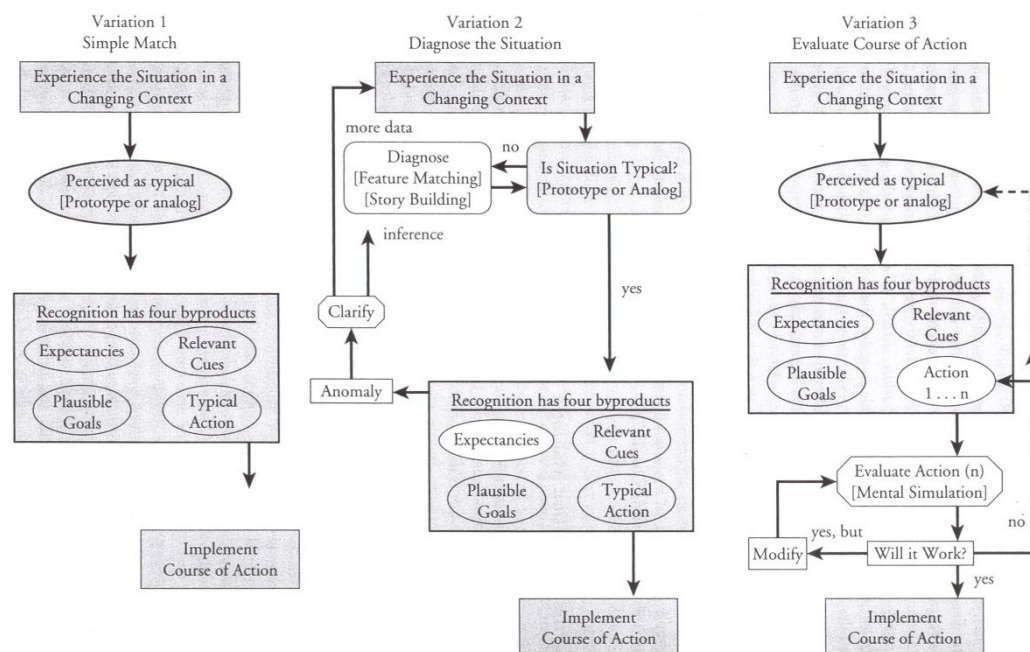


Figure 7.1. The Recognition-primed decision model. (*Blackwell Handbook of Judgment & Decision Making*. D. J. Koehler and N. Harvey, Editors. Copyright 2007 by Blackwell Publishing. Oxford, UK. Reproduced with permission of Blackwell Publishing; awaiting confirmation).

Thus, current thinking in this area suggests that, in real-world settings, a “blending” of systematic analysis and intuition exists to include the recognition of patterns stored in memory. This concept has been termed ‘skilled intuition’ by NDM researchers and the conditions that are necessary for the development of this are explored in the following section.

Conditions for the Development of Skilled Intuition

Kahneman and Klein (2009) suggest that two conditions must be satisfied for skilled intuition to develop: an environment of sufficiently high validity (where there are stable relationships between objectively identifiable cues and subsequent events) and adequate opportunity to learn and practice the skill (prolonged practice and feedback that is rapid and unequivocal). The first condition, in particular, appears somewhat difficult to determine given the open description of “an environment of sufficient regularity, which provides valid cues to the situation” (p. 520).

Interestingly, and far before these distinctions were broadly applied in the literature, Shanteau (1992) considered the role of ‘task characteristics’ in determining the competence of experts in different domains. Domains in which ‘good’ and ‘poor’ expert performance had been observed were identified and, where poor performance was observed, the stimuli were dynamic and generally involved human behaviour (e.g., clinical psychologists and counsellors). As such, it is likely that applied sport psychology would be classified alongside these similar professions. Furthermore, Shanteau (1992) suggested that because experts in these domains are “being asked to evaluate and decide about what is in effect a moving target, they do less well” (p. 258). However, it was also observed that, paradoxically, experts in the less predictable behavioural domains are held to higher standards of performance. It could be argued that these domains, where problems are less predictable and decision aids are rare, are the very ones that would benefit from the development of skilled intuition **coupled with** concomitant ‘auditing’ by more conventional/slower paced analytical reflection.

One difficulty that exists is how ‘skilled’ intuitions can be distinguished from heuristic-based intuitions, especially given the dynamic characteristics of the environment described above. ‘Imperfect intuition’ is considered to arise either because the environment is not sufficiently regular, or it has not been mastered (e.g., a talent scout’s “feel” that someone will make it; Kahneman & Klein, 2009). These intuitions also come from memory and include intuitive errors (Frederick, 2005), anchoring phenomenon (Mussweiler & Strack, 2000), and attribute substitution (Kahneman & Frederick, 2002). Notably, intuitions that arise from heuristics and biases are less trustworthy than intuitions based on specific experiences (a feature which offers a further clue to the desirability of ‘combination’ approaches, and also to the greater use of ‘peer’ supervision to audit decisions). As Kahneman and Klein (2009) point out, people are not aware of the origins of the thoughts that come to mind and, as a result, caution is necessary to prevent over confidence about the accuracy of a judgment. These authors suggest that: “the safe way to evaluate the probable accuracy of a judgment (our own or somebody else’s) is by considering the validity of the environment in which the judgment was made as well as the judge’s history of learning the rules of that environment” (p. 522).

The fragility of human judgment was cast into the spot light in Phillip Tetlock’s (2005) book on “Expert Political Judgment”, which showed that experts were not significantly more reliable than non-specialists in guessing what is going to happen in the field they study (Menand, 2005). Tetlock (2005) used the metaphor of “The Hedgehog and the Fox” to illustrate the ways in which experts may differ in their thinking processes (hedgehogs tend to gravitate towards a ‘big idea’ and that idea alone dictates the probable outcome; while foxes see the world as shifting

mixture of self fulfilling and self-negating prophecies). Tetlock points out that media in particular is attracted to the deterministic, overconfident hedgehogs (two hedgehogs that don't agree is even better!) who tend to get predictions spectacularly right or spectacularly wrong. Sadly, this is fast becoming the popular perception of an 'expert', especially of those appearing regularly in the media. A message of hope is forthcoming from Tetlock's work though, and that is the suggestion that expert judgment can be improved by applying lessons from cognitive science, some of which will be considered next.

Conditions for the Development of PJDM in Applied Sport Psychology

As previously outlined, PJDM in applied sport psychology appears to have elements of both analytic and intuitive thinking and, perhaps more accurately, a 'blending' of the two. Consequently, this raises the question of which decision making tradition/s to turn to for guidance on the 'development' of PJDM processes.

NDM has been described as the process of making decisions under time pressure in a dynamic or changing environment (Lipshitz, 1997). Although the applied sport psychologist is sometimes required to make decisions under time pressure (in the middle of a session or game for example) there is also considerable scope to 'analyse' before the next meeting or competition. Thus, whilst some of the conditions for NDM are met, not all of them are necessarily typical of this approach. However, the decisions made in NDM situations often involve unstructured problems, uncertain information, and shifting goals (Cesna & Mosier, 2005), which are also some of the conditions faced by applied sport psychologists. Perhaps due to the complexity of decisions made in dynamic environments, and because of the high

cognitive demand placed on the practitioner, understanding the role of expertise has been considered an important feature of NDM research (Montgomery, et al., 2005). As such, NDM research and associated methodologies carry many potential benefits for applied sport psychology practitioners.

And yet, psychology is not a profession traditionally studied by NDM researchers, perhaps due in part to the ‘poor performance’ of experts in these professions (Shanteau, 1992) or because of the greater appreciation afforded to professions with standard methods, clear feedback and direct consequences for errors (Kahneman & Klein, 2009). For example, the feedback received is considered to be delayed, sparse and ambiguous in professions such as psychotherapy (Kahneman & Klein, 2009). Professions which fall into the bracket of experts performing ‘poorly’ (such as clinical psychology, psychiatry and psychotherapy) are considered more prone to ‘fractionated expertise’ and therefore, more susceptible to overconfidence (Kahneman & Klein, 2009). In addition, these same authors’ premise that people in professions with standard methods, clear feedback, and direct consequences for error appear to appreciate the boundaries of their expertise; implying that professionals operating without these ‘markers’ do not. It seems that the current ‘fashionable’ theory, namely NDM, either avoids or dismisses these comparatively more complex, or at least less quantifiable professions.

However; there are a number of issues with these contentions, not least the image cast that professionals working in less ‘objective’ scenarios should be confined indefinitely to the scrap heap of ‘poor’ expert performers. Indeed, it has been suggested that it may be impossible to achieve expert predictive or diagnostic ability in such high-variability settings (Phillips, et al., 2004). Thankfully, Gigerenzer

(1989) offered the ‘insightful’ observation that, historically, most domains now considered to be ‘structured’ or of ‘high validity’ (e.g., meteorology) began as ‘unstructured’ domains before the advancement of science and decision aids. Furthermore, Shanteau (1992) offered the hypothesis that the performance of professionals working in ‘less-valid’ tasks should improve if they can be made more like the ‘high validity’ tasks. It is suggested that this could be done by either changing the task characteristics or by encouraging the use of strategies used in more predictable domains. A final, more optimistic assertion from Shanteau (1992) is that: “it should be possible to prescriptively improve expert competence, even when there are no objectively verifiable answers” (p. 260). Reflecting on the diverse pathways which decision making in applied sport psychology may take, coupled with the clear route diversity which seems to characterise the expert practitioner (cf. Chapters 5 and 6), it seems that the NDM-based standpoint on the development of expertise does not capture the full picture.

The distinction between domains with varying ‘task characteristics’ has similarities with ‘cognitive continuum theory’ (CCT; Hammond, 1966), according to which applied sport psychology would be placed somewhere between the analytic and intuitive ends of the scale. This composite, which involves a ‘hybrid’ of cognitive techniques, has been referred to as ‘quasi-rational’ thought (e.g., Hamm, 1988). However, Shanteau (1992) explains that CCT is not particularly compatible with theories of expertise, for example, CCT is based on a general approach to all human judgment, whether expert or naïve. As such, this theory seems limited in what it can bring to discussion of how to develop PJDM expertise.

In conclusion, consideration of PJDM in applied sport psychology calls for the unified integration of analytical and NDM approaches (e.g., Kahneman & Klein, 2009; Montgomery, 2005). The debate as to whether applied sport psychology displays the necessary ‘task characteristics’ and ‘conditions’ for the development of intuitive expertise will not be settled here but, regardless of where it is considered to sit on the high-validity – zero-validity continuum, the show must go on... Kahneman and Klein (2009) suggest that if an environment produces valid cues and good feedback, skill and expert intuition will eventually develop in individuals of sufficient talent. Notably, they fail to offer more substantial or useful guidelines on how this may best be accomplished. Frustrating as this is both the point of the thesis and a key issue for many performance related professions; however, it does highlight a gap in current research and understanding.

This lack notwithstanding, in a relatively young discipline such as applied sport psychology it seems feasible to argue that insight into the skill and intuition of experts in this field may be influential in the very development of the valid cues and good feedback that is so desperately needed by those learning the profession. In other words, there is much scope to develop the ‘task characteristics’ and ‘use of strategies’ that will allow the competence of experts to improve as Shanteau (1992) suggested. In light of this position, it is entirely logical to now consider the (somewhat limited) body of literature on the crucial question of how to *develop* judgment and decision making expertise.

7.3.3 Developing Judgment and Decision Making Expertise

In their chapter on decision making expertise, Yates and Tschirhart (2006) suggest that, despite scholarship in a range of fields including psychology, education, marketing, politics, operations, and the military, this variety of expertise appears much less well developed than one might expect. One possible explanation offered for this slow development is that the implicit subjectivity involved represents “a significant and challenging departure from most expertise scholarship, which prizes unambiguous performance criteria” (p. 423). Furthermore, a level of ambiguity remains about the decision concept itself, and about notions of decision quality and expertise.

In an attempt to clarify these issues, Yates and Tschirhart (2006) describe three perspectives on decision quality and decision making expertise; namely, Satisfying-Results, Coherence, and Process-Decomposition, as possible models for appraising decisions and decision making expertise (i.e., whether the result is satisfying, the procedures employed are logically coherent, and/or the successful execution of specific elements within the overall process). Difficulties are highlighted with each of these perspectives and, as such, the authors propose a Cardinal Decision Issue perspective (Yates, 2003) for a more complete appreciation of decision processes (i.e., decision processes are the means by which the cardinal issues are addressed for the decision at hand). The ten cardinal issues (need, mode, investment, options, possibilities, judgment, value, tradeoffs, acceptability, and implementation) can thus be placed in a “big picture” context to provide an overview of the cardinal decision issue perspective. Of particular interest is that “judgment” is presented as an aspect of decision behaviour. More specifically it is stated that

“clearly, judgments and decisions are distinct, but equally clearly, judgment accuracy imposes an upper bound on decision quality” (p. 432).

In their closing remarks Yates and Tschirhart (2006) state that it is painfully obvious how much remains unknown about decision making expertise. Yet they also paint an optimistic picture by suggesting this area is ripe for future fundamental and developmental research. In contrast, another chapter on expertise in judgment and decision making (Phillips et al., 2004) suggests that much work in this area has followed the tradition of heuristics and biases (Kahneman & Tversky, 1972, 1982). Decision research concerned with improving decision processes and describing basic mechanisms has shown that the impact of de-biasing is marginal (e.g., Fischhoff, 1982) and has not been assessed in natural “on the job” settings. Furthermore, Phillips et al., (2004) propose that expertise offers much more to decision makers than bias reduction. For example, Glaser (1996) describes the following changes that occur when expertise is developed: variable, awkward performance becomes consistent, accurate, complete and efficient; individual acts and judgments are integrated into overall strategies; with perceptual learning, a focus on isolated variables shifts to perception of complex patterns; and there is an increased self-reliance and ability to form new strategies as needed.

In considering the nature of expertise, Phillips et al., (2004) consider two traditions; lab-based (to approximate the natural performance of experts under controlled conditions) and naturalistic (the examination of expertise in natural settings). While NDM researchers have been predominantly interested in domains that require high stakes, time-pressure, uncertainty, and competing goals, Phillips et al., (2004) suggest that findings about experts’ judgment and decision processes from

these domains may be generalised to domains that are not so crisis-driven. This is encouraging, given that the conditions for development of PJDM in applied sport psychology are not entirely congruent with typical NDM research domains (see previous section). Ultimately, the goal of NDM is to study people performing tasks under conditions that are typical for their workplace, rather than solely under pressure.

Other perspectives on expertise presented are that of representation (i.e., experts seem to represent problems at a deeper level than novices; Chi, Feltovich, & Glaser 1981; Glaser & Chi, 1988) and what experts *know* and *can do* that others do/can not (i.e., declarative and procedural knowledge; Anderson, 1983). In an extension of these concepts, Klein and Militello (2005) have suggested several additional categories of knowledge related to expertise: perceptual skills, mental models, sense of typicality and associations, routines, declarative knowledge, run mental simulations, spot anomalies and detect problems, find leverage points, manage uncertainty, and take one's own strengths and weaknesses into account, which are worthy of consideration. Certainly, many of these techniques and strategies were apparent in the exploration of effective sport psychology consultation offered in Chapters 5 and 6.

To further understand expertise in decision making Phillips et al., (2004) present the previously mentioned RPD model (Klein, 1998; Klein et al., 1986) to describe how, in natural settings, experts rely on an extensive knowledge base to make judgments about situations and decide how to act. It is worth noting that this model has been developed to include variations where a situation is ambiguous or unfamiliar (e.g., by seeking additional information) and where the decision maker is

required to evaluate the quality of an initial course of action. The RPD model, originally developed based on observations of fire fighter decision-making (notably, a more objective solution setting than sport psychology), is descriptive, but also provides a frame within which characteristics of experts can be distinguished from those of novices. For example, experts do not appear to directly compare multiple options, but to use a recognition-primed strategy to make decisions (Klein, 1998). Additionally, expert decision makers use ‘satisficing’ (first described by Simon, 1957); a course of action that is workable is selected then stuck with, although it may not necessarily be the ‘optimal’ decision. This understanding of the ‘attributes’ of expert decision makers is useful to inform the development of judgment and decision making expertise.

Training Decision-Making Expertise

Phillips et al., (2004) highlight that their theoretical views on expert decision makers share the same basic premise of Kahneman and Tversky’s (1972, 1982) heuristics and biases research, but that the RPD model moves beyond this by dealing with issues of representation and process not previously considered (i.e., expertise leads to a broader and more refined set of heuristic processes that promote exceptional performance). The authors propose that this view of expertise in judgment and decision making suggests a counter-intuitive approach to improving decision making. Rather than developing domain-general decision skills with the goal of following processes that are closer to normative standards and that eliminate biases, it is suggested that improving the quality of decision processes can be facilitated by the development of substantive, domain-specific expertise.

This rationale for training ‘expertise’ rather than decision skills per se is complemented by a review of literature in which Klein (1998) identified four key ways in which experts learn: engaging in deliberate practice, and setting specific goals and evaluation criteria; compiling extensive experience banks; obtaining feedback that is accurate, diagnostic, and reasonably timed; and enriching their experiences by reviewing prior experiences to derive new insights and lessons from mistakes. Along with these learning strategies, it is suggested that personal motivational characteristics (e.g., being passionate about the job, and seeking opportunities to learn and improve) and task characteristics (see previous section on conditions for development of PJDM) will also likely impact on the likelihood of reaching expert levels of performance (Phillips et al., 2004).

In discussing further how people acquire expertise in judgment and decision making within the confines of the characteristics described above, Phillips et al., (2004) express the need to distinguish between specific and general intuitions. Specific intuitions are defined as judgments related to a particular task within a domain (for example, estimating the amount of time it will take to complete an intervention with a client) while general intuition is defined as knowledge or experience within a particular domain (for example, managing a programme of sport psychology support to a team). As such, there are apparent differences in how these types of intuition may be trained; for example, as specific judgments are relatively discrete they can be isolated as targets for training; however, a practice and feedback approach is considered to be less applicable to training general intuitions.

Building on this, Phillips et al., (2004) derived six goals from the empirical findings on expert and novice differences in knowledge and learning strategies:

enhance perceptual skills; enrich mental models about the domain; construct a large and varied repertoire of patterns; provide a larger set of routines; provide a larger experience base of instances; and encourage an attitude of responsibility for one's own learning. The authors suggest that a *scenario-based instructional approach* that addresses these six goals is promising for facilitating the development of decision making expertise in a specific domain. For example, a carefully designed series of decision scenarios combined with effective coaching can significantly increase decision quality (Phillips & Battaglia, 2003). While the traditional 'practice and feedback' approach may be inadequate, 'cognitive feedback' has been found to reliably improve performance on judgment tasks (e.g., Balzer, Doherty & O'Connor, 1989). This could be used in conjunction with 'process' and 'outcome' feedback (see Chapter 2). As such, these goals and recommendations were considered in the design of the training decision making expertise study for applied sport psychologists.

In addition, three learning tactics are suggested by Phillips et al., (2004), as well as practice and feedback, to develop skilled intuitive decision making expertise and these were also given consideration in the design of the training study. Firstly, the use of case studies is suggested to be the predominant approach for studying and reflecting on decisions. In particular, they are considered to boost vicarious experience base and enrich the mental models of the decision maker. Secondly, coaching is suggested as an adjunct to practice to provide feedback and facilitate the strengthening of the learner's intuitions. A third technique for building intuition is suggested to be presenting the learner with advance organisers, or instructional material, that direct attention to relevant aspects, declarative knowledge, and mental

models. It is highlighted that these tools must be utilised within the context of actual or simulated practice, reviewed post-hoc, and then revisions made accordingly.

In summary, Phillips et al., (2004) suggest it is possible to facilitate the acquisition of decision making expertise in specific domains with well-structured, scenario-based training sessions. In addition, understanding the components of expertise will better prepare novices to build their intuitions and training interventions based on models of expertise are proposed to help individuals form a base of experience and more complete mental models of their domain. Despite, the suggestion that this approach incorporates what has been learned by traditional judgment researchers and builds on findings from both approaches to the development of skilled judgment and decision making; one cannot help but notice the lack of emphasis on the ‘analytic’ aspect of practice features. Certainly, the emergent literature surrounding this aspect of ‘blended’ judgment and decision making expertise is noticeably absent and yet, decision making exercises (DMX’s) which “slow down the action” and teach students how to process information, recognise important cues, and make effective decisions are actively used in ‘low-fidelity’ training (Zimmerman & Harris-Thompson, 2008). Thus, the training study in this thesis additionally includes a semi-formal process, including weighing options and evaluating alternatives, in order to demonstrate the analytic and reflective aspect of the judgment and decision making process.

7.4 Summary – So Where Are We?

Thus far the thesis has introduced the notion of PJDM to applied sport psychology and operationalised this concept via a suggested mechanism that can help

us to understand the complexity involved (i.e., intentions for impact). Empirical data has been gathered to illustrate the constructs and vocabulary associated with PJDM in effective long-term consultation. This chapter has reviewed pertinent literature related to the differing approaches to judgment and decision making expertise (e.g., the RPD strategy) and highlighted that existing literature contains some hugely significant gaps, for example, whether applied psychologists could ever be considered experts in their domain. Noticeably there is little existing literature on how to *develop* judgment and decision making expertise (and in particular, even less on the ‘analytic’ end of the continuum). This is not necessarily surprising given the lack of understanding over the different degrees to which ‘intuition’ may be part of the answer. Certainly, there appears to be a dearth of guidance on the training of these crucial skills, especially in so-called ‘vague’ environments.

7.5 Where Next?

7.5.1 *Reflection-in-Action Case Study*

Chapter 8 illustrates the application of the principles which emerged from practitioner and athlete reflections in Chapters 5 and 6 into psychology support to an individual athlete using an ‘action research’ methodology. In addition, reflection-in-action concepts (e.g., framing, re-framing, and on the spot experimentation; Schön, 1991) were also integrated into the case study to illuminate into how the practitioner was “thinking” in action.

7.5.2 Training Study

The final study of this thesis utilised the few suggestions emerging from theory and literature in developing judgment and decision making expertise and the training of decision skills. In particular, a scenario-based approach was adopted incorporating the use of case studies, instructional materials, and coaching in an attempt to facilitate the acquisition of decision making expertise in novice applied sport psychologists. In addition, participants were asked to weigh options and evaluate alternative courses of action. The goal was to move practitioners up the learning curve at a faster rate by encouraging the formation of a base of experience and more complete mental models of their domain. In addition to this, frame analysis research (Schön, 1991), case formulation (Eells, 2002), and evaluation research were considered in the design of the methodology for the final study. These concepts are introduced and discussed more fully in Chapter 9.

Chapter 8. Reflection-in-Action Research: A Case Study

8.1 Introduction

In this chapter a case study of psychology support which I provided to an individual athlete is presented to illustrate the application of the principles and key messages which emerged from Chapters 5 and 6, along with the associated theoretical literature considered in Chapter 7. As such, this case study takes the form of ‘action research’ through the process of self-study and reflection-in-action (Schön, 1991). The “reflection-in-action research” methodology employed is considered first along with the rationale for using a case study. The case study itself is then presented to illustrate the application of these principles and theoretical constructs before conclusions are drawn regarding the effectiveness of this application and the overall reflection-in-action research process.

8.1.2 “Reflection-in-Action Research”

The strong emphasis on reflection-in-action (Chapter 7) in conjunction with the application of the principles emerging from practitioner and athlete reflections (Chapters 5 and 6) suggests this method of ‘self-study’ may be best categorised as ‘action learning’ or ‘action research’, in which a case study is typically used to reflect on what the researcher is doing or to understand it in new ways (Patton, 2002). Action research studies have previously been published in the applied sport psychology literature (e.g., Evans, Hardy & Fleming, 2000); however, there has been associated criticism regarding the failure of such studies to capture the nature and epistemology of action research (Gilbourne, 2000). In contrast, Tinning (1992a)

suggests that is inappropriate to consider that some individuals have the wrong idea or meaning of action research while others have got the correct version. In any case, Gilbourne (1999) suggests the typological and epistemological location of any action research project should be made transparent.

In this regard, this case study is not considered to be action research simply because it is applied practice, nor just because it is reflective in nature but specifically, because an attempt is made to understand the complexity involved and to make things more coherent than they were (McTaggart et al., 1997). Further, in maintaining the continuity of approach throughout this thesis, the epistemology utilised here is constructivist in nature (i.e., transactional and subjectivist). As such, the findings are literally created as the intervention proceeds, an understanding which is consistent with Schön's (1991) notions of framing, re-framing, and an ability to keep the inquiry moving. Indeed, as Schön (1991) describes, "The inquirer's relation to this situation is *transactional*. He shapes the situation, but in conversation with it, so that his own models and appreciations are also shaped by the situation. The phenomena that he seeks to understand are partly of his own making; he is *in* the situation he seeks to understand" (p. 150 – 151). Thus, this approach appears to fit very well with the constructivist epistemology introduced in Chapter 4.

Regarding methodology, Patton (2002) describes the distinction between action and research as blurred and suggests that action research methods tend to be less systematic, more informal, and quite specific to the problem or person for which the research is undertaken. As a consequence, the data presented in this case study were collected via a thought log/diary, one-to-one semi-structured consultations with the athlete, meetings with other service providers and significant others (including

the peer supervisor), behavioural observation, evaluation and feedback documents, and the practitioner's own reflections.

Furthermore, in action research the researcher is often directly involved in gathering the information and then studying them self. This approach certainly complements the emphasis on "reflection-in-action" that is adopted throughout the chapter and supports the intention to implement a narrow focus of study on these concepts at this stage in the thesis. Indeed, a blending of these terms would appear to offer a most accurate description of the research methodology utilised here, therefore use of the term "reflection-in-action research" is proposed as a meaningful conceptualisation of the research methodology presented in this chapter.

8.1.3 Case Studies as a Way of Presenting and Organising Data

The diverse and varied sources that made up the raw data for case analysis amounted to a large accumulation of information and material. The case study was then "constructed" using the three-step process described by Patton (2002) which included; assembling the raw case data, constructing a case record, and writing the final case study narrative. As such, the final narrative makes accessible all the information to understand the case in its uniqueness and is presented both chronologically and thematically.

As Patton (2002) suggests, in action research "the process is the product" (p. 436). Thus, a case study allows for thick description while providing a specific way of organising and analysing the data. Patton (2002) further suggests that case studies may be layered or nested, so even with a single case ($N = 1$) it is possible to study the overall programme if programme-level data is accessible. The presentation of data in

this single case study has been significantly influenced by this suggestion and consequently, is reported using multiple layers including programme, intervention, and session level analysis. This is in keeping with the multi-level principles which emerged from both athlete and practitioner reflections of effective practice together with Schön's (1991) concepts of framing and "nested" on-the-spot experimentation.

8.2 Case Study: PJDM in Action

In the majority of applied psychology support situations, practitioners are required to make a series of (hopefully) coherent decisions from the planning and organisation of an often broad-based support programme, through the design, implementation, and evaluation of interventions focused on specific issues, to the session by session and minute by minute decisions and refinements made in-situ. Given these conditions, and the extensive use of PJDM advocated in the principles emerging from practitioner reflection on effective practice, several levels of analysis were involved in the 'framing' or conceptualisation of the client's issues. In particular, the terms 'programme', 'intervention' and 'session' were used to reflect the different time scales involved. Schön (1991) refers to this as the 'action-present' "the zone of time in which action can still make a difference to the situation" (p. 62). In applied sport psychology this action-present may be the minutes or hours of an individual consultation session, but may also stretch over days, weeks, or months of an intervention or programme of work.

These levels were also in keeping with the levels of support identified by practitioner and athletes' reflections in Chapter 5 and 6. A representation of these levels in relation to the injury recovery case study utilised is illustrated in Figure 8.1.

This figure will be referred to throughout the chapter to illuminate key factors and demonstrate their multilayered coherence.

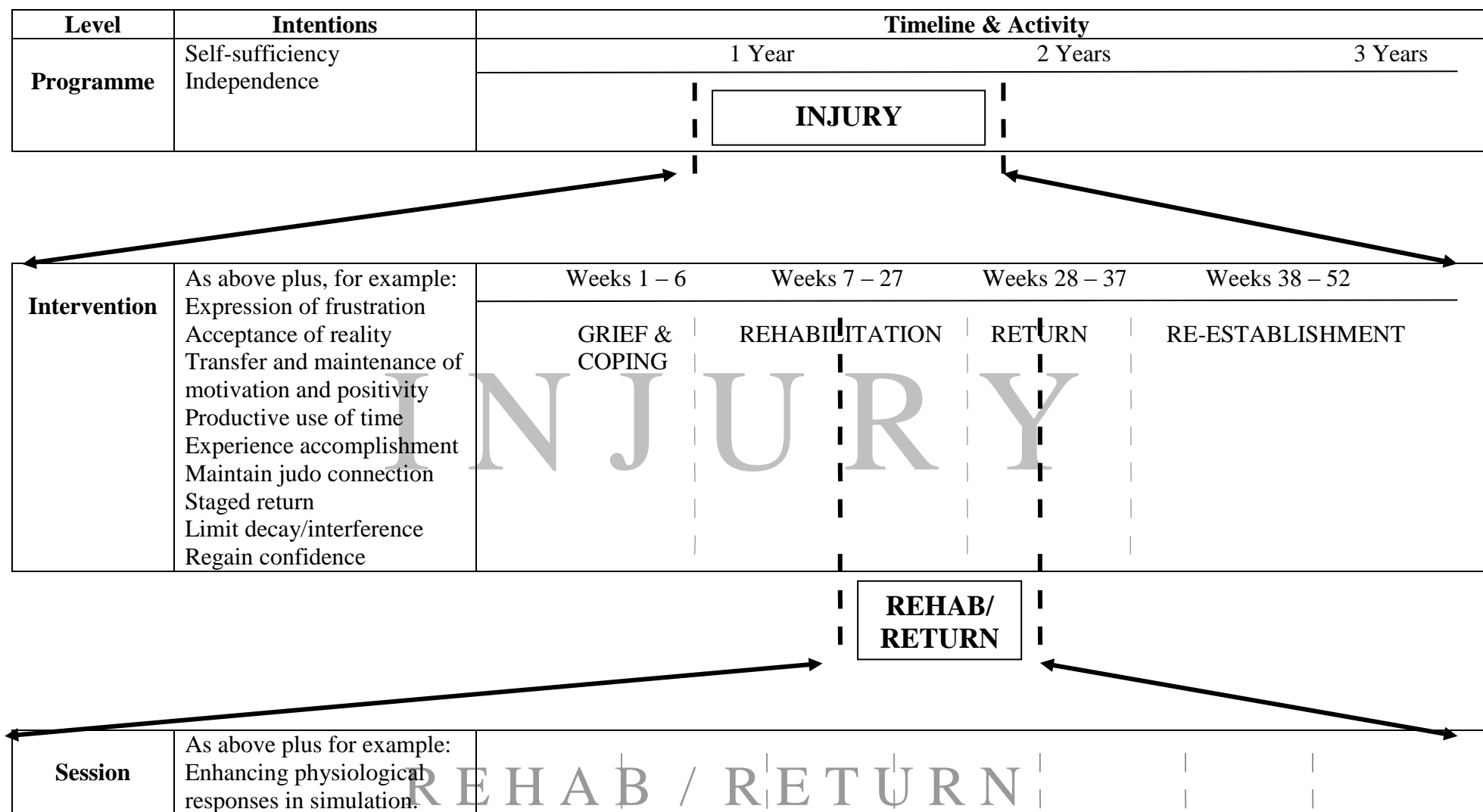
8.2.1. Programme-Level PJDM

Programme-level decisions included the practitioner's choice of theoretical orientation and professional philosophy. These, considered alongside the specific consultation context, aided programme-level framing, issue conceptualisation, and the subsequent formation of intentions for impact. Programme-level PJDM also initiated a series of implications for intervention-level and session-level PJDM (see Figure 8.1) and, as such, issues pertinent at the programme-level of planning were established and catered for within the support prior to a specific phase of intervention.

Practitioner's Theoretical Orientation and Professional Philosophy

In the intervention referred to throughout this case, support was provided from a Cognitive-Behavioural (CB) orientation (see Murphy & Murphy, 1992) and in particular a REBT perspective. This orientation was selected by the practitioner on the basis that the core conditions of CB orientations (e.g., structured planning, specific data collection, scientific methodology, and the importance of logic and reason, Hazler, 2001) most complemented the practitioner's personal characteristics, position on behaviour change, and interpretation of how clients construct perceptions of their sporting performances. As suggested by the principles emerging from practitioner reflections of effective practice (Chapter 6), this orientation was then used as a 'lens' through which to examine issues and drive practice.

Figure 8.1. Multi-layered nature of practitioner intentions for impact across programme, intervention and session levels of support



The professional philosophy adopted was to empower the athlete in order for her to be able to use the skills developed independently in training and competitive environments (Kremer & Scully, 1998). The encouragement of self-regulation and self-control complements the CB perspective, as the active and directive role of the practitioner in the early stages of support becomes increasingly consultative in nature as clients take more responsibility for their own problem solving (Hazler, 2001). In addition, an evolving relationship was considered an important principle in practitioner reflections on effective practice (Chapter 5); while the promotion of empowerment and self-sufficiency was regarded as an important principle in athletes' reflections on effective support (Chapter 6).

It has previously been reported (Martindale & Collins, 2005; Poczwardowski et al., 2004) that the theoretical orientation and professional philosophy adopted by the practitioner influences their subsequent judgments, decisions and agendas. Importantly, this is the case regardless of which theoretical orientation or variation thereof is adopted. It is proposed that issue conceptualisation is *reflected* in the intentions for impact formed by the practitioner and that these, along with the overriding theoretical orientation and professional philosophy, guide the methods and approaches used to create this impact. For example, in this injury recovery intervention, the emphasis on personal skill development was supported by external resource provision and, where appropriate, elements of deliberate challenge (core conditions of some CB environments; Hazler, 2001).

Consultation Context

The consultation context incorporated how the service provision was initiated, the overall goal/objective of support, the athlete's engagement in the support, and how the practitioner was integrated within the broader network of support. As indicated below, this information defined the logistical and practical constraints within which the practitioner was working and, as such, carried obvious implications for PJDM regarding the overall goal, scope and planning of the support programme.

In this injury recovery scenario Corrin (a pseudonym) had requested sport psychology support as part of the Judo Programme at her National Institute of Sport. At the commencement of the support, her personal coach intimated that Corrin had still to fulfil her potential in competitive judo and performance enhancement was agreed by all parties as the overall goal of support. Corrin was extremely motivated to get as much from the support as possible and the practitioner worked with her coaches and other service providers as part of an integrated programme of support.

Programme-Level Framing, Issue Conceptualisation and Intentions for Impact

Specific client issues pertinent at the programme level were considered to be Corrin being in the latter stage of her athletic career (and therefore approaching a significant transition), and personal issues involving her role in a highly co-dependent relationship. Although the details of these personal issues are omitted to protect the athlete's identity, they were incorporated into all aspects of programme-level support. For example, it was recognised that Corrin enjoyed the independence that individual sport psychology support brought. However, her desire for a high

level of interaction with the practitioner, and therefore the need to avoid transference of dependency to this support, was also acknowledged and catered for within the programme design.

The practitioner's theoretical orientation and professional philosophy along with the consultation context strongly influenced programme-level issue conceptualisation and the subsequent formation of intentions for impact. Using the support provided to Corrin as an example, the philosophy adopted to empower the individual drove an intention to impact on the fostering of self-sufficiency and independence. The consultation context was considered alongside the overriding theoretical and professional stance to ensure support was tailored to the individual. In this example, the development of independence was additionally beneficial for Corrin being part of a co-dependent relationship.

Thus, programme-level issue conceptualisation consists of PJDM based on theoretical orientation, professional philosophy, the consultation context and any over-riding client-specific circumstances. Furthermore, programme-level intentions for impact *reflect* the practitioner's programme-level issue conceptualisation and it is suggested that these constructs assist the practitioner in developing an overall "frame" for the situation (illustrated here in Figure 8.1).

Programme-Level Planning

Programme-level PJDM directly influenced the issue conceptualisation and intentions for impact formed at intervention and session levels of support (See Figure 8.1). As a result the practitioner engaged in programme-level planning to ensure that support remained coherent throughout intervention and session levels. This emphasis

on planning and the gradual layering of support was also one of the principles emerging from practitioner reflections of effective practice (Chapter 5). The following sections demonstrate how programme-level issues and intentions continued to be addressed at the subsequent intervention and session levels.

8.2.2 Intervention-Level PJDM

A change in the client's presenting issues, coupled with emerging circumstances during the long term support, initiated a revision of intervention-level PJDM and led to a modification in the direction of support provided. In this case, the change was due to Corrin experiencing a serious knee injury and undergoing a substantial period of rehabilitation. At the time she was ranked as National No. 1 for her weight category and had just been selected to compete at a major championship she had not previously attended. Given the late stage in her career and the extent of her injury (a complete rupture of the anterior cruciate ligament), Corrin understandably found this to be a distressing situation. It was immediately apparent that support to Corrin would undergo a transition from being predominantly performance-focused to assisting with recovery from serious injury and all the personal, social and practical consequences of this. As with any significant change to the direction of support, a context specific needs analysis was carried out to assess the requirements of the situation.

Intervention-Level Needs Analysis

The decision to practice from a CB perspective had subsequent implications for the way in which the client needs analysis was carried out (i.e., data collection to

test and adjust certain hypotheses). In accordance with the core conditions of the CB environment, the emphasis was on acquiring as much critical, detailed information as possible to identify the potential directions and interventions that could now emerge (Hazler, 2001). As such, assessment took place in each of the key areas identified in Lazarus' (1981) BASIC ID format (behaviour, affect, sensations, imagery, cognitions, interpersonal and drugs/biology). As advocated by Heil and Henschen (1996), several data collection methods were used to triangulate the analysis of Corrin's needs. These included a diary/thought log, regular semi-structured consultations, informal interviews with social support, regular consultations with the physiotherapist, and observations of physical demeanour and body language (see Evans et al., 2000, for more detail on some of these methods).

Intervention-Level Framing, Issue Conceptualisation and Intentions for Impact

The presenting issues or emerging circumstances were just one factor involved in the conceptualisation of intervention-level issues. In this example, conceptualisation was aided by awareness of Corrin's personality and lines of reinforcement, understanding of her life situation and social support systems, use of mainstream psychology, sport psychology and sport science knowledge bases, and empathy for the needs of rehabilitation and performance environments. While this is not an exhaustive list, it illuminates the types of factors which contributed to intervention-level issue conceptualisation. Of particular interest here, and an area for further research (see future directions section), is the extent to which the practitioner's knowledge bases are accessed and utilised in the formation of intentions for impact.

Once an understanding had been gained of the major issues involved at the intervention level, ‘framing’ and ‘form’ (considered by Lipshitz, 1993, to be parameters of decision making) were central considerations. Framing (how problems or contexts are framed) represented how the identified issues may be catered for within a framework of support; in other words, through the design of a series of stages or phases during which the issues may be addressed. Form (how action is selected) was represented by the practitioner’s intentions for impact. Once again, it is proposed that intentions for impact *reflect* the practitioner’s issue conceptualisation.

As rehabilitation from injury typically follows a series of phases or stages, psychological support to Corrin was considered more likely to be effective if it was matched to (and evolved with) these phases (Moran, 2004). In this case, it was envisaged that Corrin would encounter stages of Grief and Coping (e.g., Kubler-Ross, 1969), Rehabilitation, Return, and Re-establishment as an athlete. As such, the intervention was designed to either impact on a specific phase within this staged approach or to evolve as the athlete progressed toward re-establishment. Each phase of intervention will now be discussed in turn to illustrate how the formation of intentions for impact *reflected* the practitioner’s issue conceptualisation (see Table 8.3 for a summary of this information). While some references are provided for information, an extensive insight into the knowledge bases utilised by the practitioner is not. It was felt that this was a necessary appropriate omission in order to maintain the focus of the chapter. To re-iterate, the description provided in this chapter is not an attempting to provide a comprehensive scientific rationale and justification for the intervention, but rather to use it as an example to illustrate the process of PJDM and reflection-in-action.

Importantly, in order for the support to remain coherent, framing, issue conceptualisation and intentions for impact formed at the intervention-level were influenced by, and catered for; programme-level framing, issues, and intentions for impact (refer to Figure 8.1). For example, consideration of programme-level intentions with Corrin (to foster self-sufficiency and independence) significantly influenced the practitioner's formation of intervention-level intentions for impact (see rehabilitation section for example).

Grief and Coping. The major issues here were considered to be Corrin's upset and loss over being forced to withdraw from the major championship, her acceptance of the injury and how this would affect her daily life, and her adjustment to this new (albeit temporary) situation. These issues were reflected in the practitioner's intentions for impact, which were for Corrin to express her upset and frustration, to accept the harsh reality of her situation, and to transfer her motivation, positive focus and positive attitude for competitive judo toward her goals for rehabilitation, return and re-establishment (Ievleva & Orlick, 1993).

Rehabilitation. The major issues for this phase were considered to be the likelihood of Corrin pushing herself too hard and thus negatively impacting on her rehabilitation, the possibility of her becoming frustrated or dejected by her progress, the prospect that time may drag given her inability to work, and the loss of judo from her daily life accompanied by her reluctance to "replace it with something else". As such, the practitioner's intentions for impact were for Corrin to appreciate that "less is sometimes more" for effective rehabilitation, to maintain her motivation, positive focus and positive attitude throughout the coming months, to use her spare time productively and enjoy feelings of challenge and accomplishment, and to maintain

Table 8.1. Summary of how intentions for impact reflect issue conceptualisation and drive implementation at programme, intervention and session levels of support.

Level	Issue	Intention for Impact	Implementation
PROGRAMME	Approaching career transition Strong dependent relationship	Fostering self-sufficiency Fostering independence	High level of scientific elaboration Collaborative consultation
INTERVENTION			
Grief & Coping	Upset and loss Acceptance of injury Adjustment	Expression of upset and frustration Accepting the harsh reality Transfer of motivation/ focus/attitude	Provision of comfort/ support Use of REBT counselling skills Making of a motivational video
Rehabilitation	Over eagerness Frustration/dejection Time dragging Loss of judo	Re-education “less can be more” Maintain motivation/ focus/ attitude Use time productively/accomplishment Maintain connection with judo world	Re-enforcement of physio messages Goal setting element Personal development element Performance simulation
Return	Timing of return Decay/interference Fear of re-injury/ preference	Encourage realistic timing/ staged return Limit amount of decay/ interference Prevent likelihood of fear/ preference	Creation of realistic perspective Performance simulation Positive imagery
Re-establishment	Technique adaptation Loss of confidence Scrutiny regarding recovery	Encourage flexible adaptation Regain confidence Perceive favourably	Use of technical coaches / videos Systematic de-sensitisation Attribution re-structuring
SESSION	Concentration wavering Anticipation difficulties Missing physiol. responses Not experiencing gripping/ fatigue sensations	Enhance concentration Enhance anticipation Enhance physiological responses Enhance sensations	Stand on mat rather than sit by side Use usual training partner Complete CV workout prior to simulation Use theraband during simulation

her connection with “the judo world”. In addition, programme-level issues and intentions for impact were considered here as the practitioner envisaged that encouragement of career transition preparation would be appropriate during this phase.

Return. The major issues here were considered to be the timing of Corrin’s return to training and competition (she was always going to push to return earlier than she was perhaps ready to), the inevitable decay and interference in her judo techniques and overall motor control, and the likelihood of her experiencing fear of re-injury and a preference for her uninjured leg. Based on these issues the practitioner’s intentions for impact during this phase were for Corrin to be realistic regarding the timing of her return, experience a staged return to technique training and randori (fight training), take steps to limit the amount of decay and interference in her motor control and specific judo techniques (e.g., Schmidt & Wrisberg, 2000) and to pre-empt and prevent the likelihood of fear and leg preference.

Re-establishment. The major issues during this phase were considered to be the possibility that Corrin’s injury and subsequent rehabilitation may place physical restrictions on her judo repertoire such that she may be forced to adopt or favour new techniques, that she may remain tentative in her approach to fighting and either risk further injury or not regain her previous confidence, and that she would likely be under scrutiny from coaches and competitors anxious to see whether she would be able to “come back” from the injury. As such, the intentions for impact formed by the practitioner for this phase were for Corrin to take a flexible approach in the review of her judo techniques in order for her to adapt her repertoire as necessary,

regain her positive, confident performances, and be able to perceive any scrutiny as favourably as possible (Ievleva & Orlick, 1993).

Intervention-Level Implementation

An intervention package was subsequently designed around the practitioner's intentions for impact on the four phases of Grief and Coping, Rehabilitation, Return, and Re-establishment referred to above. The building of these intervention phases to reflect the practitioner's framing or conceptualisation of intervention-level and programme-level issues satisfied the recommendation by Poczwadowski et al. (1998) to expand on the crucial mediating phase between needs analysis and intervention. Continuing with this example, some intervention-level implementation is now discussed. Again, this is not exhaustive, but is used to illustrate how implementation was driven by the intentions for impact identified earlier (see Table 8.1 for a summary of this information).

Grief and Coping. Implementation during this phase initially involved the provision of comfort and emotional support to facilitate the expression of loss and grief. Some Rational-Emotive Behaviour Therapy (e.g., Ellis, 2001) skills were briefly employed to aid Corrin in finding a rational perspective and outlook on her situation. A motivational video including footage of her best scoring attacks was made in collaboration with Corrin to help transfer her motivation, positive focus and positive attitude toward her rehabilitation. This video also provided Corrin with visual models of her performance, which could be used to generate positive images of her in training and competition, thus supporting her imagery skill development and mental practice (Perry & Morris, 1995).

Rehabilitation. Implementation during this phase included reinforcing messages from Corrin's physiotherapist regarding her rehabilitation; in particular not to over exert herself. A goal setting element was designed in collaboration with Corrin to help her maintain motivation, positive focus and a positive attitude. This element aimed to enhance physical, mental, emotional and social well being in accordance with the suggestion by Heil (1993) that these are the major categories of stress during injury.

A personal development element was devised in collaboration with Corrin to ensure that she still experienced the feeling of challenge and accomplishment (Ievleva & Orlick, 1993). This element included Corrin identifying and pursuing new skills during her time away from judo; particularly important, as the injury had resulted in such an extensive change in lifestyle. Programme-level intentions for impact (to foster self-sufficiency and independence) were also addressed here, thus reflecting the multi-layered nature of intentions for impact and PJDM in general. This provided Corrin with the opportunity to plan for her transition from competitive judo and what she might like to do afterwards. As a result, Corrin undertook distance learning courses, learnt basic computing and I.T. skills, attended coaching workshops, participated in a youth sport inclusion project and, amongst other things, learnt how to play golf and to juggle!

A performance simulation element was designed in collaboration with Corrin as a means to maintain her connection with the judo world, whilst also bridging some of the issues and concerns anticipated for the 'return' phase of the intervention. This element utilised the PETTLEP approach (Holmes & Collins 2001a) and spanned a

period of 6 months during which Corrin participated in regular judo performance simulation sessions by the side of the mat as her counterparts trained.

Return. Implementation during this phase included the encouragement of a realistic perspective regarding the timings of her return to training and competition. For the most part though, focus was placed on the performance simulation developed during the rehabilitation phase. This allowed Corrin to experience a staged return to training and randori (fight training) through the progressive integration of simulation and performance as she was able. It also contributed to limiting the amount of decay and interference expected in her motor control and execution of her judo techniques (see Jeannerod, 1994, 1997 for more detail). Corrin was encouraged to use positive images of physical strength, capability, and success to reduce fears of re-injury.

Re-establishment. Implementation during this phase involved the encouragement of a flexible and adaptive perspective with regard to her repertoire of techniques, encouraging conversation with technique coaches, and use of video/performance analysis. Corrin's transition from tentative first performances to positive, clinical fighting was systematically built up as her confidence returned and she became de-sensitised toward the challenges of competing again (e.g., Cox, 2002). Re-evaluating any negative attributions of performance or scrutiny from others in a more favourable and helpful way was also actively encouraged.

8.2.3 Session-Level PJDM

Certain issues became apparent session by session or even minute by minute within a session. As such, framing, issue conceptualisation, and intentions for impact formed at the session-level were generally made at speed, especially as a refinement

to the intervention or interaction may be required immediately. However, these intentions for impact were still being informed by appropriate knowledge bases and therefore carried with them a scientifically underpinned rationale. Despite the specificity of session issues, intentions for impact here were also formed in accordance with both the intervention-level and the higher programme-level intentions for impact to ensure that support was coherent and moving in a planned direction for a deliberate purpose or purposes (again refer to Figure 8.1). This is consistent with the emphasis on planning and gradual layering of support which emerged as a key principle in practitioner reflections of effective practice (Chapter 5).

Session-Level Framing, Issue Conceptualisation, and Intentions for Impact

The session-level issues were numerous, so for brevity and as an example, the series of difficulties that Corrin experienced as her performance simulation progressed are used to illustrate the practitioner's PJDM at a session-level. These included her concentration wavering, difficulty with anticipating opponents' movements, missing the physiological responses of fighting, and difficulty in experiencing the sensations of gripping and fatigue.

Session-level framing and issue conceptualisation involved the understanding, confirmation and elaboration of the client's presenting issue or issues within or against an associated framework (in this case the PETTLEP model; Holmes & Collins, 2001a). As such, a session-level needs analysis was conducted to ensure the practitioner had all the necessary information. The issue or issues, considered

next to the client's goal or target behaviour (which may be devised in collaboration), were then reflected in the practitioner's intention for impact.

In this example, session-level intentions for impact were formed to enhance the effectiveness of Corrin's performance simulation by addressing each of the specific difficulties she was experiencing (concentration, anticipation, absence of physiological responses and sensations - see session-level refinement). These intentions were considered along side intervention-level intentions (e.g., to limit the amount of decay and interference in her motor control and specific judo techniques) and programme-level intentions (e.g., fostering self-sufficiency and independence) in the refinements made to her performance simulation programme.

Session-Level Refinement

Data were collected on the effectiveness of Corrin's performance simulation from imagery evaluation worksheets she completed following each session. This worksheet was designed to be relatively quick and easy to complete while generating feedback on all the elements of her simulation. In addition, some quantitative data were also collected through ratings on the Visual and Kinaesthetic Imagery Scales provided in the appendix of the Vividness of Movement Imagery Questionnaire devised by Issac, Marks and Russell (1986).

This information was then used to refine aspects of the performance simulation which were causing Corrin difficulty, thus allowing her imagery skill to develop and evolve whilst ensuring intervention-level intentions (e.g., to limit the amount of decay and interference in her motor control and specific judo techniques) were being met as far as possible.

During these sessions, the practitioner listened to and conceptualised the arising issue, formed a session-level intention for impact, and devised a refinement to the performance simulation in collaboration with Corrin for her to try at the next session and to subsequently feedback on the effectiveness. Session-level intentions for impact were predominantly based on the principle of functional equivalence (Lang, 1977, 1979; Jeannerod, 1994, 1997) which provides a strong scientific and theoretical underpinning to performance simulation, a feature often missing from many traditional verbal script methods. Refinements were then made to the element of the PETTLEP model (Holmes & Collins, 2001a) judged most likely to impact favourably on Corrin's performance simulation. These refinements included Corrin standing on the judo mat rather than sitting by the side (environmental element) to enhance concentration, simulating performance against her usual training partner (timing element) to enhance anticipation, completing a CV workout prior to simulation (physical element) to enhance physiological responses, and use of a theraband during simulation (task element) to enhance sensations of gripping and fatigue.

With particular reference to programme-level intentions for impact regarding self-sufficiency and independence, Corrin was kept fully informed of the scientific underpinning as to why the developments and recommendations were likely to be of benefit. The inclusion of this declarative knowledge, whilst not always indicated as a feature of intervention, should be the norm if the theoretical orientation and intentions for impact described here are to be optimised.

8.2.4 Multi-level Evaluation

The effectiveness of the case study was evaluated at multiple levels of support. For example, at a session level, Corrin completed imagery evaluation worksheets to provide comment and ratings on each of the factors in her performance simulation. This feedback could then be used to make adjustments to the programme ahead of the next session.

At an intervention level, written feedback was received from Corrin regarding the overall effectiveness of the imagery intervention. This was left unstructured to allow Corrin to express without constraint how she felt the intervention had been of use. This feedback included comment on her increase in imagery ability and confidence, the ease of her transition back to full involvement in her sport, and the benefit she got from not feeling cut-off from her “judo-world”.

At a programme level, Corrin and I engaged in a number of reflective discussion or informal interviews following the end of this phase of intervention. This included reflection on the skills and experiences gained which she could now transfer into her ongoing sporting career as well as a more holistic assessment of how this phase had encouraged “change” within her at a more fundamental level (e.g., empowerment and self-sufficiency).

In terms of outcome, following her return from injury Corrin went on to surpass her previous best performances at World Cup events, compete in the major championship she missed through this injury, and to finish 9th at the World Judo Championships; an event she had not previously attended. As such, the pinnacle of her judo career came after returning from this injury, which was a very pleasing outcome.

8.3 Discussion

Following the presentation of the case study to illustrate the application of the principles which emerged from Chapters 5 and 6; the effectiveness of this process and the use of a reflection-in-action research methodology are discussed below. In doing so, implications are drawn from considering the nature of PJDM in applied sport psychology and future research directions are considered.

8.3.1 Application of Principles to Practice

Beginning with the principles emerging from practitioner reflections of effective practice; the extensive use of PJDM was reflected in the nested and hierarchical planning, multi-level provision of support (i.e., the complexity of issue conceptualisation and formation of multi-level intentions), and the gradual layering of support toward the long term goal of re-establishment as a fit and confident athlete. This strong emphasis on planning and the gradual layering of support was again indicative of an attempt to impact at a deep processing level (i.e., for enduring change). The promotion of knowledge transfer was encourage through highlighting how already existing mental skills and strategies for performance could be of assistance with rehabilitation from injury. Furthermore, the encouragement of control, empowerment, and confidence were directly promoted as part of the practitioner's professional philosophy.

The use of an element of challenge was perhaps more subtly integrated throughout the case study, for example, in encouraging the athlete to accept the harsh reality of her situation and adjust to the new (albeit less favourable) scenario rather than dwell on the "what ifs". As such, the communication style was, at times,

deliberately directive; however, every attempt was made to create a safe and trusting environment, so that this interaction style could be interpreted as supportive and encouraging.

Furthermore, the relationship between the practitioner and Corrin evolved to be more collaborative in nature as the support progressed, which is an inevitable feature of the self-sufficient professional philosophy adopted, as well as a core condition of cognitive-behavioural environments. The level of contact did not fluctuate as suggested by the principles emerging from practitioner reflections of effective support and this was partly due to the context (i.e., support was being provided through an institute based programme with a set number of days support per month), but more pertinently because this intervention represented one phase in a longer term programme and the particular context merited 'little and often' contact. Reflecting on the overall programme of support however, which spanned over 4 years, the amount of contact did significantly fluctuate across this time.

In considering the implications for practice emerging from the practitioner reflections of effective support, the theoretical orientation was used as a 'lens' to examine the issues and drive practice. In particular, the complexity of framing, issue conceptualisation, and intentions for impact along with the depth of planning reflected this influence. The relationship established and the way in which the practitioner worked were considered to be consistent with the cognitive-behavioural orientation adopted. Furthermore, the timescales on which practice was designed to impact were illustrated through the multiple levels used to structure and frame the context.

In terms of the principles emerging from athletes' reflections on effective practice, the practitioner as an "agent of change" was integrated within the choice of theoretical orientation. The use of a CB perspective complemented the active encouragement and promotion of change using an element of challenge to direct and guide behaviour. That support was reinforced at multiple levels: programme, intervention, and session; suggests that any change was likely to be lasting and enduring (i.e., effective at a deep level of processing; Entwistle and Waterston, 1988).

The promotion of empowerment and self-sufficiency was a feature of the professional philosophy selected by the practitioner. As such, these concepts were integrated at the programme level, but were equally considered throughout the intervention and session levels of support. For example, the relationship between Corrin and the practitioner became increasingly collaborative as decision making regarding the direction of intervention was shared (e.g., refinements to the performance simulation).

The scope of the interventions provided over the year long phase was captured through the practitioner's "framing" of the context (see Figure 8.1) and through the issue conceptualisation and intentions for impact formed at programme, intervention, and session levels. In this case, the support was framed at multiple levels (programme, intervention, and session) and within chronological phases (grief and coping, rehabilitation, return, and re-establishment). This provided structure and coherence throughout this phase of intervention and allowed insight into the complexity of the applied process.

The case study also took into consideration the implications which emerged for practice and training (relationship management, nested planning, and subtlety in pursuit of goals). In particular, the possibility of transference of dependency to the practitioner was managed through the use of an independent and empowering professional philosophy which encouraged self-sufficiency in the athlete at all times. The nested nature of planning was especially evident in the multi-level framing of the context (see Figure 8.1) and this approach allowed for a subtle pursuit of goals, for example, support provided at a session level was undertaken with an awareness of the issues and intentions relevant at higher intervention and programme levels.

In conclusion, the majority of principles emerging from the practitioner and athletes' reflections of effective practice (presented in Chapter 5 and 6) were applied to, and represented in this case study in an effective manner. As such, the principles appear to be transferable to other practitioners and consultation settings (it should be noted that the theoretical orientation adopted by the practitioner in chapters 5 and 6 and the practitioner in this case study were consistent). Furthermore, it is likely that these principles along with those integrated from the reflection-in-action literature are likely to offer practitioners some worthwhile guidelines for developing coherent practice and for gaining insight into the complexity of their PJDM processes.

8.3.2 Implications from PJDM in Action

Evaluation

The first implication to emerge from this illustration of PJDM in action is that, as well as spanning different phases of implementation, evaluation should take place at session, intervention, and programme levels of support. For example, at the

session level, Corrin completed an imagery evaluation worksheet following each performance simulation session.

Secondly, the evaluation of impact as gauged by the client, the practitioner, and others (e.g., peers, coaches, employers) should be considered alongside the practitioner's intentions for impact. In other words, rather than assessing generic characteristics, processes, or outcomes, impact should be evaluated in relation to the practitioner's specific intentions and the subsequent methods and channels used to create this impact (e.g., the nature of the goal and the nature of the relationship). Assessing the series of decisions made by the practitioner is an essential feature of enhanced evaluation procedures. In this example, the practitioner engaged in peer supervision throughout the programme of support to debate the rationales underpinning issue conceptualisation, intentions for impact, and implementation strategies.

Reflective Practice

It is suggested that this practice should include reflection on the practitioner's framing, issue conceptualisation, intentions for impact and implementation. In other words, we should reflect on our PJDM as well as on the process and outcome of support (cf. The use of terms such as "check my arithmetic" by the participant in Chapter 5). Schön (1991) suggests reflection on "the tacit norms and appreciations which underlie a judgment, or on the strategies and theories implicit in a pattern of behaviour...on the feeling for a situation which has led him to adopt a particular course of action, on the way in which he has framed the problem he is trying to solve, or on the role he has constructed for himself within a larger institutional

context” (p. 62). This crucial quote highlights where the current gap exists in reflective practice (i.e., we are reflecting on ‘what’ we have done more so than ‘why’ we have done it).

As an example, data and feedback from Corrin’s evaluations of her imagery training demonstrated that the practitioner’s intentions for impact with performance simulation were met (i.e., for Corrin to maintain a connection with the judo world, to experience a staged return to training, and to take steps to limit the amount of decay and interference in motor control and technique). Specifically, Corrin reported perceived control over her situation; she could participate in sessions rather than having to sit and watch, thus maintaining her desired connection with judo. Corrin felt the development of her performance simulation ability facilitated her confidence in returning to full participation in judo and was influential in her accelerated return and re-establishment. In addition, she was able to use her well-honed imagery skills to enhance subsequent competitive preparation and performances.

In the debate about how and what to reflect on, it is proposed that multi-level PJDM processes and theory-practice interactions are vital components.

Professional Development and Training

Reflecting on PJDM at session, intervention, and programme levels of support encourages a deeper level of conceptualisation and coherence of practice than is currently acknowledged. This enhanced conceptualisation provides a platform from which to further develop our expertise in providing applied sport psychology support. For example, if we have a deeper understanding about what we do then we can work to develop expertise in identified key areas for progression.

Researching practitioners' PJDM also allows us to gain insight into which aspects of the applied process may indicate or predict effective practice. For example, it has been proposed that intentions for impact reflect the practitioner's issue conceptualisation and that this formulation process significantly influences the framing and implementation of support. As such, identified differences in novice and expert PJDM would indicate which areas require development in our professional training procedures. In particular, accessing and utilising a range of knowledge bases would appear to be central to PJDM in action. Additionally, choosing among alternatives, preferences for planning, the formulation of agendas, the role of tacit knowledge and intuition, the speed of processing, the flow of refinement and the role of problem-based learning (e.g., Heinrichs, 2002) in our professional training are all worthy of more investigation.

8.3.3 Reflection-in-Action Research

In describing how professionals *think* in action, Schön (1991) states that "In real-world practice, problems do not present themselves to the practitioner as givens. They must be constructed from the materials of problematic situations which are puzzling, troubling, and uncertain" (p. 40). This case study has attempted to provide an illustration of this construction process with a focus on "framing" the context. Schön (1991) describes that, as practitioner's frame the situation, they determine the features to which they will attend, the order which they will attempt to impose, and the directions in which they will try to change it. Hopefully, this case study has provided an example of this process in action through identifying the ends to be

sought (i.e., the nature of the goal/s) and the methods to be employed (i.e., the nature of the relationship).

Accordingly, this case study most closely resembles *repertoire-building research*, one of four types of reflective research suggested by Schön (1991). This type of research serves to accumulate and describe exemplars in ways useful to reflection-in-action. It is hoped that this case study has not just displayed the linkages between features of action, outcome, and context, but also reveals the path of inquiry which led from the initial framing of the situation to the eventual outcome. Certainly, this is suggested by Schön (1991) as an important direction for this research.

In taking this forward, it is suggested that applied sport psychology practitioners do frequently think about what they are doing while they are doing it; indeed, reflection-in-action is unlikely to be a rare event. However, the scope and depth of reflection may be limited by the lack of recognised systems in place or knowledge of the factors underpinning the choices. Indeed, at an elementary level, practitioners may not even be aware of the possibility of alternatives (see note on ‘satisficing’ in Chapter 7).

Interestingly in this regard, Schön (1991) suggests that reflection-in-action is not generally accepted, even by those who do it, as a legitimate form of professional knowing. Furthermore, he proposes that:

“many practitioners, locked into a view of themselves as technical experts, find nothing in the world of practice to occasion reflection... For them, uncertainty is a threat; its admission is a sign of weakness. Others, more inclined toward and adept at reflection-in-action, nevertheless feel profoundly uneasy because they cannot say what they know how to do, cannot justify its quality or rigor. For these reasons, the study of reflection-in-action is critically important” (p.69).

This reflection-in-action research has revealed some important implications for applied sport psychology practitioners. For example, consideration should be given to the differences in the *constants* that practitioners bring to their reflection-in-action (Schön, 1991 describes these as the media, language and repertoires; the appreciative systems; the overarching theories; and the role frames which different practitioners bring p. 269). This has subsequent implications for the use of systematic eclecticism, as Schön (1991) highlights; “the difficulty with this approach is its implicit reliance on an unexamined idea of effectiveness... in selecting an approach best suited to a particular client, he makes implicit reference to an idea of effectiveness which is constant for all clients. But with change of frame, the idea of effectiveness also changes” (p. 313 – 314). This quote demonstrates the role of framing and conceptualisation in the evaluation of effectiveness; it must be a central feature as the way in which a practitioner frames the context and situation has direct implications for what they intend to do and how they intend to do it. Further development of practitioner’s coherence in framing their practice would therefore appear to be a worthy pursuit.

8.3.4 Conclusion

This chapter demonstrates the multi-layered nature of PJDM in action in applied sport psychology. As Figure 8.1 illustrates; practitioner intentions both feed up *and* draw down throughout programme, intervention, and session levels of support. This would suggest that, in the majority of cases, intentions formed by the practitioner are not single functions but rather, are dynamic and aimed to impact across the multiple layers of support.

Researching and uncovering practitioners' PJDM in action offers an intriguing insight into the application of sport psychology. In particular, it highlights the complexity of PJDM, and provides a window into the processes of framing, issue conceptualisation, and intention formation. It is suggested that practitioners are likely to form intentions for impact on the overall programme of support, on specific phases within applied interventions, and on individual sessions. This, in turn, carries implications for the types and levels of planning that practitioners may be encouraged to engage in.

Of course in practical terms, as applied practitioners will appreciate, service provision takes place primarily at the session-level. The proposal that intentions for impact reflect multi-layered issue conceptualisation thus demonstrates that everyday practice carries with it the capability to influence intervention and programme levels of support. As a result, a practitioner initiating change at a session-level will be initiating change at all levels of the support. Indeed, small changes in a single session have been recognised as holding the potential to create a snowballing effect that can initiate significant improvements in a person's functioning (Erickson, 1974; Kottler, 1999). The recognition of this "snowballing potential" (represented in Figure 8.1) opens the door for the investigation of "critical incidents" that occur during an individual session. These incidents have been referred to in consulting and clinical psychology as "change events" or "change episodes" (Rice & Greenberg, 1984) and form part of an increasing body of research into how an individual session can produce change. Investigating how change events or episodes can be created in applied sport psychology would assist our evaluation of what interventions make what type of impact at what particular time with a client.

This approach reflects PJDM in other fields where relatively long term relationships are maintained (e.g., teaching and coaching), and although it is suggested that this is applicable in the majority of cases, such a complex framework may not be appropriate for all applications of sport psychology support. However, even brief contact interventions have strategic elements and are likely to be successful due to a pre-established working alliance and a good understanding of the individual and their performance issues (Giges & Petitpas, 2000). Crucially, this chapter has also explored the limitations in current practice with regard to reflection.

8.3.5 The Final Study

A number of possible directions could have been pursued for the final study of this thesis, namely developing multi-level evaluation methods, integrating PJDM principles into a reflective practice framework, or developing a deeper level of conceptualisation in professional training. Each would be a worthy direction in its own right; however as the overall thesis is about developing PJDM expertise in applied sport psychology, the training option appeared to most aptly meet this goal. A further empirical study in this direction could provide support for PJDM principles as a means to make real and observable differences to the development of practitioners in the field; a finding that would provide a suitable and desirable end point to the thesis. In addition, recommendations, suggested directions and further areas for research in evaluation and reflective practice could be highlighted in the general discussion of the thesis to ensure these possible research threads are not left unattended.

As such, the final study in the thesis was a training intervention based on the PJDM principles which emerged in earlier chapters and the further theory considered in Chapter 7. The central questions being; “Can these principles and theoretical considerations improve the performance of novices?” and therefore, “How can we develop the PJDM expertise of applied sport psychology practitioners?”

Chapter 9. Training PJDM Expertise in Novice Applied Practitioners

9.1 Introduction

The importance and role of PJDM principles in applied sport psychology practice have been highlighted by literature (Chapters 2 and 3), explored through practitioner and athletes' reflections on effective practice (Chapter 5 and 6), and illustrated by way of integration into a reflection-in-action case study in Chapter 8.

Thus, the complexity of PJDM in applied sport psychology has begun to be unravelled as the range of information to be managed and the different levels at which the practitioner may operate have become increasingly apparent. For example, the nature of the 'goal' and the nature of the 'relationship' established have been shown to be underpinned by a chain of practitioner decisions across multiple levels (Chapters 5 and 8). In support of this, Girot (2000) suggests that professional judgment in the decision making process cannot be prescribed as practitioners cope with uncertainties and challenges experienced in everyday practice in very complex and individual ways. As such, learning from 'recipe experiences' of expert performers (i.e. *what* they did) is useless unless considered in tandem with *why* they did it (Martindale & Collins, 2010).

Furthermore, issue conceptualisation has been identified as both a neglected and essential component of applied sport psychology practice (e.g., Poczwardowski et al., 1998). Indeed, traditional reporting of practice has often led directly from the needs analysis phase onto the intervention/s via a short and succinct "statement of the problem": in short, with little consideration given to the PJDM undertaken by the practitioner in order to arrive at their intended plan of action. In particular, the practitioner's theoretical orientation, professional philosophy, and model of practice

appear to (or at least, should) guide practice during this phase. As such, the knowledge bases utilised, the intentions formed, and the characteristics displayed have been shown to be especially important in maintaining coherent support to athletes (Chapters 5, 6, and 8).

So far, the research presented in this thesis has drawn implications for advancement in evaluation, reflective practice, and training of applied sport psychology. While each of these directions are worthy of further research, the consideration of how PJDM expertise may be trained in novice practitioners is of particular interest. As such, this final study aimed to discover whether training focused on PJDM principles and the further theory considered in Chapter 7 could improve the performance of novice practitioners (i.e., whether the principles could assist in the development of PJDM expertise).

9.1.1 Training PJDM Expertise

The discussion of PJDM expertise presented in Chapter 7 revealed several perspectives on expertise, including representation (i.e., experts seem to represent problems at a deeper level than novices; Chi et al., 1981; Glaser & Chi, 1988), what experts *know* and *can do* that others do/can not (i.e., declarative and procedural knowledge; Anderson, 1983), and that experts do not appear to directly compare multiple options, but rather to use a recognition-primed strategy to make decisions (Klein, 1998) especially in routine and/or time challenged situations. In particular, Phillips et al., (2004) suggested that expertise leads to a broader and more refined set of heuristic processes that promote exceptional performance. This suggestion

complements both Schön's (1991) notions of 'framing' and 're-framing,' and the principle of 'issue conceptualisation' explored earlier in the thesis.

These concepts are therefore vital for consideration in training PJDM expertise and, as such, Phillips et al., (2004) derived six goals from the empirical findings on expert and novice differences in knowledge and learning strategies, namely to: enhance perceptual skills, enrich mental models about the domain, construct a large and varied repertoire of patterns, provide a larger set of routines, provide a larger experience base of instances, and encourage an attitude of responsibility for one's own learning. These goals draw parallels with reflection-in-action concepts regarding how professionals think in action, for example, mental models may be enriched by the creation and maintenance of 'virtual worlds' which Schön (1991) suggests are crucial to the practitioner's ability to perform artistically and experiment rigorously. In relation to Klein's (2004) RPD model, 'pattern matching' is considered to be intuitive, while 'mental simulation' is considered to require deliberate analysis (Klein, 2009). In addition, Schön (1991) advocates 'repertoire-building' as a way of making practitioners' experience accessible to them for understanding a situation and taking action (an example of repertoire-building research was illustrated in Chapter 8).

9.1.2 Strategies of Enquiry and Methods of Data Collection

The concepts discussed above regarding the training of PJDM expertise were directly considered in the strategies of enquiry selected for this final study. In particular, Phillips et al., (2004) suggested a scenario-based instructional approach that addresses the six goals identified as a promising option for facilitating the

development of decision-making expertise in a specific domain. As such, a carefully designed series of decision scenarios (case study vignettes) combined with instructional material was designed to impact on decision quality (e.g., Phillips & Battaglia, 2003).

In accordance with Phillips et al., (2004) three learning tactics were utilised to develop decision making expertise. Firstly, case studies were used to study and reflect on decisions made. In relation to the goals for training PJDM expertise, case studies are considered to boost vicarious experience base and enrich the mental models of the decision maker while providing the context of simulated practice. Secondly, instructional material that directed attention to relevant aspects, declarative knowledge and mental models was used to educate practitioners between pre- and post-test case studies. Finally, coaching was provided following the completion of the intervention as an adjunct to practice in order to provide feedback and facilitate the strengthening of the learner's intuitions.

In seeking a tool to analyse the notions of representation, framing, and issue conceptualisation, the "case formulation" approach utilised in clinical psychology was selected to provide a formal evaluation of these procedures (Eells, 1998). Case formulation is "a set of hypotheses about the causes, precipitants, and maintaining influences of a person's psychological, interpersonal, and behavioural problems" (Eells, 2002) and has been promoted as a core psychotherapy skill (Eells, 1997). According to Schaffer (1983), case formulation skills include the therapist eliciting relevant data and integrating the information into a conceptualisation of the patient's main problem, the extent to which a coherent plan for change follows logically from the conceptualisation, and the extent to which interventions are in sequence or

context as specified by theory. As such, the case formulation approach was considered to parallel representation, framing, and issue conceptualisation, which have emerged as central PJDM concepts in this thesis.

Perhaps unsurprisingly given the parallels described above, case formulation itself is underpinned by the study of expertise in cognitive processes (e.g., superior pattern recognition, Chase & Simon, 1973; emphasis on comprehension in problem solving, and representation in more abstract and meaningful conceptual categories, Glaser & Chi, 1988). In particular, the idea that experts see and represent a problem at a “deeper” level than novices who are more likely to represent a problem by its’ surface features is significant for training PJDM expertise.

Previous literature suggesting the use of a case formulation approach in sport psychology consulting (e.g., Gardner & Moore; 2005) has promoted its use for applied practitioners, particularly in terms of athlete assessment. While the use of this approach for informing decision making is alluded to, a full appreciation of knowledge construction is not offered. For example, Gardner and Moore suggest the practitioner is required to make “correct” decisions regarding the best intervention (p. 430) while Eells, Lombart, Kendjelic, Turner, and Lucas (2005) suggest that case formulation meets the criteria for ill-structured problems which are less well defined and where agreement on the “correctness” of a proposed solution is more difficult. As such, the use of a case formulation approach in the training of novice practitioners of sport psychology has not previously been proposed in the literature, although its utility can be gleaned from current use in parallel branches of psychology.

Parallel studies have been conducted in clinical psychology, for example, Kendjelic and Eells (2005) tested a generic case formulation training model and

found that therapists undergoing a two-hour training session produced higher quality formulations than a matched group of therapists who did not. Thus, training these aspects of practice in novice sport psychologists seems a worthwhile pursuit, whilst undertaking pre and post-tests could determine whether such instruction can have an impact on performance. Certainly, Girot (2000) suggests that exposure to the academic process alone influences decision making in practice as well as the ability to search for alternatives or options. In short, research in parallel fields supports the contention that improving their PJDM could enhance the performance of applied sport psychologists.

As such, this study used a scenario-based instructional approach to identify and measure the representation, framing, and issue conceptualisation of novice applied sport psychologists. Participants were assessed before and after a block of instructional material to ascertain whether PJDM principles could directly influence novice practitioners' PJDM expertise. An adapted version of Eells et al.'s (2005) "Measures of Case Formulation Quality" was used to assess this process as a form of summative evaluation research (Patton, 2002) to show whether a training effect had occurred.

9.2 Method

9.2.1 *Participants*

An opportunistic sample of postgraduate students studying for a Masters degree in Performance Psychology (N = 11, M = 5, F = 6) took part in the research. At the time of the study, they had completed one semester of the overall course. None of the participants had experience practising as a psychologist, although two

had a number of years teaching experience (participants 5 & 6) and one had consultancy experience as a life coach (participant 8). All participants were considered to be of a comparable standard regarding the application of sport psychology, and were considered to be ‘novice’ applied sport psychology practitioners. Although these tasks were included as part of the course content, the participants could ‘opt out’ of having their results included in this study. As such, 11 participants out of a possible sample of 15 provided informed consent to take part.

9.2.2 Case Vignettes and Response Booklet Design

Participants completed two applied sport psychology vignettes related to stress and coping, a topic on which all participants had received 20 hours of education in the preceding semester. The vignettes were 192 and 183 words long and detailed identifying information, presenting issues, history of presenting issues, and status with additional outside stressors (see Appendix G). Given the similarity in the amount and nature of detail provided and previous use at a standardised level (i.e., final year undergraduate degree assessment), the vignettes were considered to be of a comparable level of difficulty. Half the participants completed Case A for the pre-test while the other half completed Case B; the alternate vignette was then completed by participants in the post test to ensure that completion order was balanced.

A response booklet was devised as the means by which participant data would be collected (Abraham & Collins, 1998). This contained four sections and used a tabular format for participants to record their responses. Section one concerned the needs analysis and asked the participants “What would you assess/test/measure?” “How would you do this?” and “Why would you

assess/test/measure this?” Participants were also asked to note any alternatives they considered, but decided against. Section two concerned the intervention components and asked “What would you plan to do?” “How would you do this?” and “Why would you plan to do this?” Again, participants were asked to note any alternatives they considered, but decided against.

The last two sections explored progress evaluation against contrasting scenarios. The third section was contextualised against the intervention going well after 6 weeks; participants were asked “What key performance indicators would you look for?” regarding each of the intervention components and “Why?” Similarly, the fourth section contextualised the intervention as not going well after 6 weeks, asking the same questions “What steps would you take to rectify the situation?” and “Why?” Again, in both cases participants were asked to note any alternatives they considered, but decided against for these sections.

These questions were designed to provide insight into the processes of representation, framing, and issue conceptualisation, thus they assessed procedural and declarative knowledge (Anderson, 1983), decision making skills (e.g., searching for information, considering alternatives or options, and evaluation of consequences; Jenkins, 1985), and critical thinking skills (e.g., problem solving, logical reasoning, analysis of information, and formation of conclusions; White et al., 1990; Watson & Glaser, 1991; Bandman & Bandman, 1995).

As the format used in the response booklet was tabular, blank A3 paper was also provided and the participants were encouraged to use “concept mapping” to facilitate the process. This was included as individuals may conceptualise information in different ways and this approach allowed for a creativity that may

have been lost in the structured, tabular format. In addition, this method was considered to provide insight into the novice practitioner's use of mental models and virtual worlds when 'thinking-in-action' (e.g., Schön, 1991).

9.2.3 Procedure

A brief was given to participants describing the purpose of the study and the associated procedure. Informed consent was obtained and, in particular, confidentiality stressed whilst the option of withdrawal from the study without bias was highlighted. Participants then completed a pre-test case vignette under exam conditions using the response booklet provided. Six hours of instructional content (3 x 2 hour sessions provided one per week for three weeks) was then delivered, covering the main PJDM principles which emerged from Chapters 5, 6, and 8. The instructional material included sessions on needs analysis and assessment (e.g., strategic approaches to intervention, planning and coherence of support), the process of change (e.g., theoretical orientations, models of intervention/practice and core conditions of the CB environment) and the agent of change (e.g., issue conceptualisation, the nature of goals and relationships, accessing knowledge bases, intention formation, and consultant characteristics; see Appendix H). A post-test case vignette was then completed using the response booklet (again under exam conditions). Students opting out of participation completed exactly the same process as part of an applied skills unit in their Masters course. The only difference was that their scores were not considered in this study.

The timeline (3 x 2hr sessions) was selected as this best allowed for the instructional material to be covered adequately whilst complementing the logistical

arrangements of the postgraduate taught programme. In addition, Kendjelic and Eells' (2005) parallel study in clinical psychology found that higher quality formulations were produced after just two-hours of training, thus six-hours was considered to be sufficient for change to occur.

9.2.4 Data Analysis

The response booklets were assessed using an adapted form of the measures of the case formulation quality criteria (Eells et al. 2005, see Appendix I). Each criterion was then assessed using the corresponding likert scale as utilised in Eells et al., 2005 (e.g., for complexity: *0= insufficient information; 1 = very little complexity; 2 = little complexity; 3 = moderate complexity; and 4 = high complexity*). Thus, each participant recorded a score for comprehensiveness, planning elaboration, precision of language/terminology, complexity, coherence, intervention plan elaboration, goodness-of-fit, and systematic process for a pre and post-test case vignette.

To limit investigator bias, an independent researcher was used in addition to the primary researcher to rate the response booklets using the adapted case formulation quality criteria. This researcher was blind to which vignette had been completed first and to the training that had been received by the participants. The independent researcher was a BPS Chartered Psychologist and a BASES Accredited Sport Psychologist with 8 years of consulting experience. Mean scores generated by the independent researcher for each participant and for each criterion were calculated for pre and post-tests. Differences in pre and post-test scores could then be analysed using inferential statistics, as described in the following section.

9.3 Results

9.3.1 Descriptive Statistics

Preliminary analysis revealed no significant differences in pre-test scores for vignette A or B: $t(9) = -1.65, p > .05$ nor post-test scores for vignette A or B: $t(9) = -1.26, p > .05$ confirming there were no differences in case difficulty. As no differences in case difficulty were recorded, scores were collapsed into pre or post-test categories.

Means and standard deviations of “total case formulation quality” for each participant were calculated for pre and post tests, along with the means and standard deviations of each criterion pre and post test. These are displayed in Table 9.1 and 9.2. Figure 9.1 shows the mean score of each criterion pre and post test. Only two participants (5 & 6) did not show an improvement from pre to post tests.

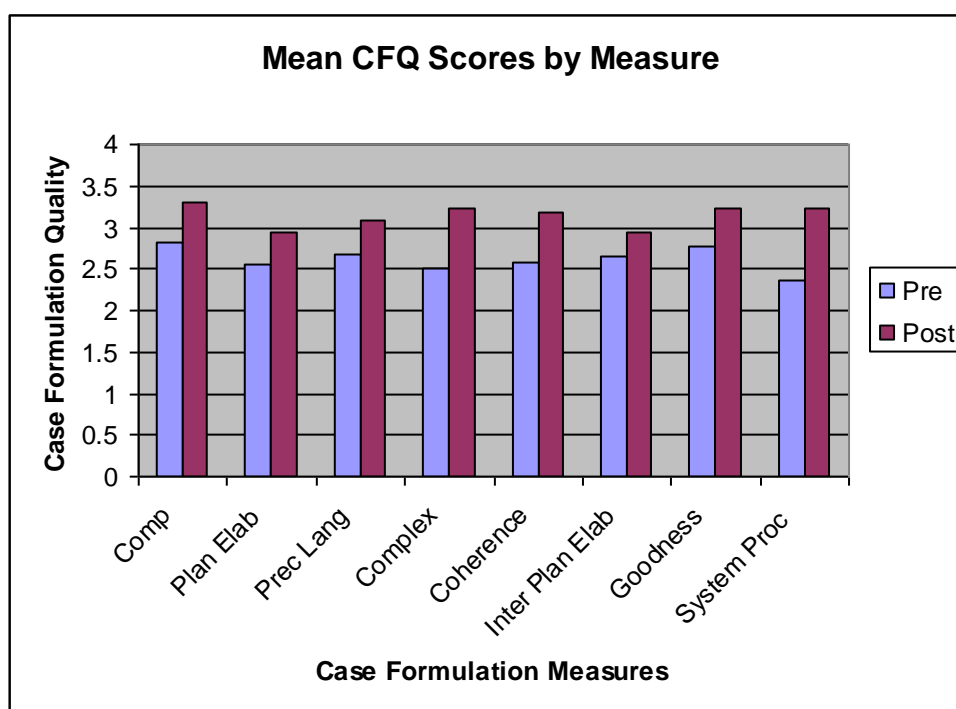
Table 9.1. Means and standard deviations of total case formulation quality for each participant in pre and post-tests.

Participant	Pre-Test Mean and S.D.	Post-Test Mean and S.D.
1	2.63 (.23)	2.94 (.18)
2	3.00 (.00)	3.81 (.37)
3	3.44 (.42)	3.88 (.23)
4	2.81 (.26)	3.25 (.46)
5	4.00 (.27)	2.94 (.18)
6	2.69 (.26)	2.00 (.71)
7	1.13 (.35)	2.63 (.35)
8	2.75 (.27)	3.25 (.60)
9	2.63 (.44)	4.19 (.26)
10	2.31 (.26)	2.75 (.71)
11	1.38 (.74)	3.00 (.00)

Table 9.2. Means and standard deviations of each case formulation criterion for pre and post tests.

Case Formulation Criterion	Pre-Test Mean and S.D.	Post-Test Mean and S.D.
Comprehensiveness	2.81 (.72)	3.31 (.51)
Planning Elaboration	2.55 (.93)	2.95 (.82)
Precision of Language / Terminology	2.68 (.72)	3.09 (.70)
Complexity	2.50 (.87)	3.23 (.68)
Coherence	2.59 (.92)	3.18 (.51)
Intervention Plan Elaboration	2.64 (1.07)	2.95 (.99)
Goodness-of-Fit	2.77 (.88)	3.23 (.85)
Systematic Process	2.36 (.87)	3.23 (.75)

Figure 9.1. Mean score of each case formulation criterion for pre and post tests.



The primary researcher's ratings showed a similar positive trend to the independent researcher, if not more so (e.g., no cases of deteriorating performance). As these ratings may have been subject to bias they were not included in the formal analysis of results, however they do offer support to the independent ratings.

9.3.2 Inferential Statistics

Due to the relatively small sample size ($N = 11$) the data were considered to be non-parametric. This assertion was based on the data failing to meet the parametric assumptions (as confirmed by the Kolmogorov-Smirnov test) and the necessary power calculations. As the aim was to compare two related conditions, the Wilcoxon Signed-Rank Test was selected. Four significant differences ($p < .05$) in case formulation criteria were found between pre and post case studies. The quality of 'Comprehensiveness', $z = -1.71$, $p = .04$, $r = -.36$, 'Complexity', $z = -2.23$, $p = .01$, $r = -.47$, 'Coherence', $z = -1.98$, $p = .02$, $r = -.42$, and 'Systematic Process', $z = -2.00$, $p = .02$, $r = -.43$ were significantly higher in the post-test case studies than in the pre-test case studies. The other four criteria displayed a similar positive trend, but the change failed to reach significance.

9.4 Discussion

Two central questions emerged from the analysis of results provided above; namely, why may the criteria for comprehensiveness, complexity, coherence, and systematic process have improved more significantly than the other criteria? Secondly, and obviously impacting upon these overall results, why did the two participants with a number of years experience in teaching go against the overall trend and not improve from pre to post-test? These questions will be addressed in turn, beginning with the exploration of a possible mechanism for the overall improvement in observed PJDM expertise.

9.4.1 Critical Thinking: A Mechanism for Improvement in PJDM Expertise?

It is contended that the source of improvement in PJDM expertise was likely to be the academic study of the instructional material engaged in by the post-graduate participants. In particular, it is well recognised that, irrespective of academic discipline, the goal of graduate status is the development of critical thinking skills (Barnett, 1987; Glen, 1993). Critical thinking has been referred to as the ability to problem solve, reason logically, analyse information, and form conclusions (e.g., White et al., 1990; Watson & Glaser, 1991; Bandman & Bandman, 1995). Furthermore, Jones and Brown (1991) suggest it is a complex cognitive process requiring higher order thinking and application to decision making in practice.

It is possible that development of this higher order thinking (as a result of the instructional material provided) led to the improvement in quality of comprehensiveness, complexity, coherence, and systematic process. Certainly, it is possible to see how these criteria could be improved through the development of principles to guide representation, framing, and issue conceptualisation. As the intervention period was only 5 weeks long it seems likely that the instructional material, rather than the experience of post-graduate study itself, was the change agent. Indeed, it also seems plausible that the remaining case formulation criteria: planning elaboration, precision of language / terminology, intervention plan elaboration, and goodness-of-fit may require further training involving a more sustained period of instruction in order to improve as significantly.

Due to the inherent complexity, the measurement of critical thinking and decision making in practice is reported to lack valid, reliable, and available tests (Giroto, 2000). Furthermore, Giroto (2000) suggested that the higher education

experience must develop students' reflexive, analytical skills and combine critical thinking with its application to practice. As such, it is also proposed that greater understanding is needed as to how applied practitioners make decisions in their dynamic and uncertain world of practice and how higher education can facilitate this process through academic study (Giot, 2000).

This study goes some way towards addressing these concerns; in particular it appears that a scenario-based instructional approach regarding domain-specific PJDM principles may accelerate the training curve. In addition, benefits to the participants may include a greater ability to apply theory to practice, an increase in confidence/self-efficacy, and increased empathy through increased understanding (e.g., Eells et al., 2005). Indeed, qualitative feedback from the participants in this study included that it was “*eye opening*”, “*challenging*”, “*interesting*”, and “*a wake-up call*” suggesting that the process provoked some self-reflection. Furthermore, the experience appears to have been beneficial for the participants involved, examples of feedback include “*it was enjoyable, I liked it*”, “*a good opportunity*” and “*good to put theory into practice*”.

9.4.2 Cases of Non-Improvement: Transfer of Learning Limitations?

An interesting finding was that the two individuals who had a number of years teaching experience did not improve from the pre to post tests despite the instructional material provided. While it is possible that these individuals' learning styles were, coincidentally, not suited to the approach taken, it seems plausible that something about their training as teachers influenced this outcome. For example, it could be that they had already developed ‘higher-order’ representation or planning

processes as a result of their professional experience. If so, it is possible that these more developed thought processes could be less flexible to adaptation within a new domain of expertise, or that some sort of negative transfer occurred. To draw a parallel with skill learning, it could be that transfer of learning was inhibited by prior experience in professional situations or that a different approach is required to capitalise on these individuals existing processes and encourage domain-specific thinking (see Haskell, 2001). The possibility of ceiling effect was considered, but was not apparent. Individual scores on the case formulation criteria for participant 6 revealed that there was very little difference in pre-post scores for the four criteria in which a significant overall group improvement was made (i.e., greater deterioration in the other four criteria). There was no meaningful difference in scores pre and post for participant 5 (i.e., performance was generally less good across all criteria).

9.4.3 Study Limitations

A number of limitations exist that could have implications for the status of the findings and the subsequent interpretations made. An independent researcher was used to eliminate any potential bias that could be introduced by the lead researcher who was familiar with the participants, content of instruction, and research design. However, the independent researcher had not previously used the Measure of Case Formulation Quality criteria and, so it is possible their assessment was not entirely consistent across participants. The use of a multiple assessors to provide inter-rater reliability could address this concern in future research. Other steps were taken to limit any bias from the independent researcher (e.g., order of completion was balanced).

Secondly, a number of other factors could have influenced the findings for example a practice effect (i.e., the participants had already been exposed to the sort of questioning included in the case booklet by the post-test). Additionally, there may have been an expectancy effect on the behalf of the participants (i.e., “I should be better at this second time round” and so increase effort or persistence for example). Any possible expectancy effects on the behalf of the independent assessor should have been eliminated by the blind and reversed design incorporated into the data analysis (e.g., the researcher did not know which case study the participants had been completed before or after the intervention).

A question may remain over the appropriateness of using case formulation as the method by which to analyse participants’ decision-making processes. As previously stated, this approach was imported from clinical psychology and while there are clear similarities between the two professions, there are also some obvious differences, not least in the overall goal for practice. As such, some debate remains as to whether this tool is the most appropriate measure to use for gauging representation, framing, and issue conceptualisation in applied sport psychology.

A further limitation concerns the nature of learning and retention. This study was conducted over a 5 week period (i.e., a pre and post test with 3 weeks of instruction material in between). As such, any improvement recorded was only apparent across a very short time scale. However, considering the instruction was designed to impact at a deep processing level, further assessment over the long term would be necessary in order to demonstrate this effect. In addition, there is scope to research the effect of ‘coaching’ on performance across timescales.

Chapter 10. General Discussion

Presented in the final chapter of this thesis are the overall conclusions, implications and recommendations, future research directions, final conclusions, and a personal review of the PhD process. Suggestions for “Developing PJDM expertise in Applied Sport Psychology” are made through consideration of the conclusions, implications and recommendations and future research directions in developing ‘evaluation’, ‘reflective practice’ and ‘training’ of PJDM expertise.

10.1 Overall Conclusions, Implications and Recommendations

10.1.1 Conclusions, Implications and Recommendations for Developing Evaluation

The identification of effectiveness indicators by Anderson et al. (2002) has provided a platform from which the emergent profession has developed both formal (e.g. BASES accreditation) and informal (e.g. BASES workshops on effective evaluation) evaluative procedures. However, the critical review of literature presented in Chapter 2 demonstrated that the current indicators, whilst important, do not capture the full array of constructs on which the practitioner may impact; nor do they evaluate the breadth and depth of increasingly varied practice. This carries important implications for how comprehensively we are evaluating applied sport psychology practice and subsequently, for how effectively we can justify its impact.

Reflecting these concerns, and ideas raised throughout the thesis, it appears that significant gains in the development of evaluation in applied sport psychology could be made through the expansion of both process and outcome measures. For example, while the crucial role of practitioner decision making is increasingly

recognised in the literature (e.g., Martindale & Collins 2005, 2007 & 2010), it is not currently a central feature of process evaluation. Of particular relevance here is the recognition that evidence-based practice is important for “allowing sport psychologists to make informed decisions regarding the most effective interventions” (Gardner & Moore, 2006, p. 67). As discussed, the content of these decisions, the knowledge bases accessed in their formation, and their role in issue conceptualisation can be utilised to enhance the evaluation of process effectiveness in applied sport psychology. Indeed, though pending exploration by further research, there is a strong case based on other professional domains that these constructs are more powerful concomitants of expertise and, as such, a better focus for development.

Accordingly, this thesis has demonstrated a need to establish clearer guidelines for the content of our evaluation (through the development of process and outcome measures) and a need to extend this clarity to our evaluation methods and mechanisms, while still maintaining the flexibility necessary to accommodate consultation context and individual specific practice.

So, What Else Could We Evaluate? Messages from PJDM Literature and Research

This thesis presented the case for researching PJDM in applied sport psychology and, in particular, the practitioner’s “intentions for impact” (Hill, 1992) has been proposed as an extremely valuable concept to help us navigate through the complexities of PJDM. These intentions represent the rationale for selecting a specific behaviour, response, technique, or intervention to use with a client at a given moment. As such, they represent not only what the practitioner envisages the eventual outcome of the intervention to be, but also the way in which they intend to

relate to the client throughout the process (i.e., the nature of the goal and the nature of the relationship required to get there). Extending these arguments, this thesis has suggested that intentions formed by the practitioner are not single functions but rather are dynamic, aimed to impact across multiple layers of support, and reflect the mediating phase of issue conceptualization previously neglected in applied sport psychology (Poczwardowski, et al., 1998).

The consideration of intentions for impact offers insight into “the cognitive component that mediates the choice of intervention” (Hill & O’Grady, 1985, p.3). In support of their crucial role, it is suggested that intentions refer to *why*, whereas interventions or techniques refer to *what* the practitioner does. As such, intentions are a step closer to describing how consultants think about their subjective experience in sessions: an important and meaningful but often overlooked construct. The exploration and illumination of intentions allows the practitioner to clarify and think through what they are doing in a session or series of sessions with a client and provides a more in-depth representation of the actions taken (Hill & O’Grady, 1985).

Thus, the inclusion of practitioner PJDM as an integral part of case studies and as fundamental content in reflective practice would address this identified gap in evaluating the process of our practice (See next section on reflective practice for more details of process measure development). As demonstrated, this focus on practitioner decision making has an underpinning scientific rationale for evaluation which is already utilised effectively in other branches of psychology.

Outcome Measure Development

Another implication from PJDM literature and research is that a central feature of evaluation must be an emphasis not on standardised features of practice,

but rather “on the individual and contextual nature of professional decision making” (Reagan et al., 1993). As such, generic characteristics, skills, or responses (such as those suggested by Anderson et al. 2002); should be clearly contextualized, client-specified and assessed in relation to both practitioners’ intentions and the subsequent methods and channels used to create this impact (e.g., the nature of the goal and the nature of the relationship). Equally, the unique style and practice of consultants in relation to their chosen theoretical orientations and professional philosophies must be catered for, especially given that these constructs significantly influence subsequent judgment, decision making and intentions for impact (See Chapter 3). This would suggest the use of bespoke but a priori outcome measures, which can be adapted by the practitioner and client to capture and evaluate the specific context of the support. Such an evaluative model, which recognises the multidimensional nature and complexity of practice and contexts, does not yet exist but I propose it is time for its genesis.

How Else Could We Evaluate? Developing Evaluation Methods

In this section a brief description is offered of exemplar evaluation methods, not previously considered in the applied sport psychology literature. Such methods would enhance procedures in line with the areas for development highlighted in this thesis. This brief overview is provided as an indication that alternatives are available which could bring positive benefits and which would complement the evaluative model proposed in this thesis.

Developing Process Evaluation Methods

The process of case formulation has recently been presented as a method to help the sport psychology consultant assess the athlete and conceptualise the assessment data (Gardner & Moore, 2005). A core skill in the parallel discipline of psychotherapy, case formulation offers a set of hypotheses about the causes, precipitants and maintaining influences of a person's psychological, interpersonal and behavioural issues (Eells, 1997; 2002). While case formulation is an example of a method which could be utilised to reflect on and evaluate the process of applied sport psychology practice (see the training study in Chapter 9 for an example of this), two alternative process methods are suggested here which are distinguished by the types of information they can access.

Concept Mapping is proposed as a measuring tool for accessing practitioners' issue conceptualization and knowledge representation. A concept map is a graph of nodes and labelled lines which represent terms and concepts in a given domain, and is used to measure important aspects of an individual's declarative knowledge (Ruiz-Primo, 2004). The use of concept mapping techniques and technologies are rapidly increasing across education and performance support; for example, knowledge externalisation in medical education (Bruchner & Schanze, 2004), classroom (Conlon, 2004) and team cognition (O'Conner, Johnson and Khalil, 2004), the latter finding relevant application in elite team sport (e.g. Richards, Collins & Mascarenhas, 2010). Additionally, the recognised use of concept mapping in qualitative research (e.g., Daley, 2004) and the examination of concept maps as assessment tools (e.g., Ruiz-Primo, 2004) have clarified some methodological issues concerning quality, cognitive validity and user-generalisability. The training study in

Chapter 9 used concept maps with developing applied sport psychology practitioners; both as a method for displaying their knowledge and conceptualisation of case studies and for evaluation purposes with promising results.

The second suggested process measure is *Brief Structured Recall* (BSR; Elliott, 1993; Elliot & Shapiro, 1988) which is proposed as a method to access practitioner intentions (and potentially, client reactions). This is a form of tape-assisted recall established in counselling and psychotherapy research which is used to access information about practitioners' and clients' moment to moment internal experiences. In these procedures, tapes of sessions are played back in order to elicit descriptions of the experiences and perceptions of the participants. The covert processes that can be recollected through such procedures include practitioner intentions and decision-making processes, as well as client intentions, feelings and immediate reactions (Elliot, 1986). Feedback from both practitioner and client is crucial to develop a 'map' of the conduct, flow and impact of the session and to see whether practitioner intentions (and actions) have created the desired effect.

Developing Outcome Evaluation Methods

In tandem with stronger measures of process, a range of alternative, client-based outcome measures across multiple levels of support is suggested to capture the dynamic nature and various timescales of applied sport psychology support. At a session level, the evaluation of constructs such as session impact (Mallinckrodt, 1993, 1994; Elliott & Wexler, 1994), session reactions (Elliott, 1993), and session outcome (Greenberg, 1986) is proposed. At an intervention level, tools such as the 'experiencing scale' (Klein, Mathieu, Gendlin and Kiesler, 1969) from the theoretical work of Eugene Gendlin would provide feedback on how well the client is engaging

in the support. The latter is particularly relevant since adherence has already been shown to be a crucial and under addressed mediating variable in the impact of sport science support (Palmer, Burwitz, Smith & Collins, 1999). Finally, client change interviews could be administered at a program level (after a period of work for example) in order to gauge what has changed for the client and what those changes are attributed to, as well as helpful and non-helpful aspects of the support (Elliott, Slatick & Urman, 2001).

In summary, integrated use of process and outcome would offer the possibility of strong, objective and triangulated data to more effectively support the efficacy of interventions. As important, however, this would also offer insights into the optimum mechanisms through which this could be accomplished.

Developing Evaluation Mechanisms

In addition to the potential gains outlined above, the documentation and assessment of practitioner PJDM complements existing guidance on evaluation mechanisms. For example, Smith and Moore (2005) suggest that the evaluation process needs to be sufficiently dynamic and flexible to incorporate appropriate modifications while still maintaining a certain level of consistency. Thus, while case studies and reflective practice could utilise PJDM to capture more comprehensively the full range and complexity of processes involved (see the following section on reflective practice), modifiable evaluation forms could also be administered by practitioners systematically across various timescales and, crucially, be adapted by the practitioner and client in order to cater for the unique mediating variables (e.g., theoretical orientation, philosophy, characteristics, context, content and style). The

development of a range of outcome measures, to be considered alongside process measures more centrally focusing on practitioner PJDM, would also offer a comprehensive triangulation of measures. This approach would cater for both surface and deep approaches to change, thus offering an enhanced framework of assessment from which to evaluate consultant effectiveness.

10.1.2 Conclusions, Implications and Recommendations for Developing Reflective Practice

Process Measure Development

The significance of practitioners' decision-making in effective applied sport psychology practice has been increasingly recognised (e.g., Martindale & Collins, 2005, 2007 & 2010). However, the critical analysis and evaluation of PJDM including formal content, method, and criteria against which to reflect could beneficially be further developed. The exploration of why practitioners are doing what they're doing is an initial step in this direction. Further light is cast by considering that the professional decision maker must "deal with uncertainty by weighing alternatives and taking creative risks, while at the same time being aware that he or she is operating within a specific operational context, characterized by goals, norms, precedents and colleagues" (Conley, 1988, p. 397). The integration of Schön's (1983) suggestions regarding the content of 'reflection-in-action' would appear to be a good starting point.

The formal assessment of PJDM would add to and extend current reflective practice models utilised in applied sport psychology. For example, Van Manen's (1977) hierarchical model of reflective practice suggests that levels of reflectivity

parallel practitioner development from novice to expert. Thus, while the initial level of reflectivity focuses on the effective application of skills and technical knowledge, the second level of reflectivity begins to apply professional criteria to practice in order to make independent, individual decisions. Only then, however, can the third level of reflectivity, “critical reflection”, be reached. Crucially, this is not only the obvious aspiration of any such process but also involves the questioning of moral and ethical issues associated with practice. The question must be asked whether, without the directed and confirmed progress through the first two stages (with progress established against justifiable and progressive criteria), the expansive claims for ‘critical reflection’ (and hence its central position in formal evaluation and accreditation processes) can be justified!

Such enhanced insight would provide us with more understanding of how a practitioner has conceptualised the issues surrounding a particular client. Also, in turn, this information could considerably expand the rationale (and the usefulness) underpinning the use of case studies (by allowing the practitioner to show how they exercised professional discretion in their judgments and decisions) and allow for greater depth in peer review and self-reflection. In particular, the inclusion of process measures to evaluate PJDM would provide some much needed ‘common terminology’ and specific criteria against which to reflect (e.g., in assessing whether intervention outcomes met both practitioners’ intentions for impact and client expectation). Notably, both these factors were also central features of Schön’s (1983) original designs for RP but unfortunately, seem to have been “lost in translation”.

In addition, a deeper and more structured evaluation of PJDM processes could provide a bridge between reflection-on-action and reflection-in-action,

whereby the practitioner is able to reflect on decisions in the midst of practice as well as after the event (Schön, 1983). Thus far, literature in applied sport psychology has primarily focused on the process of reflection on action (e.g., Anderson et al., 2004). As such, the development of a reflective practice framework to include the recommendations provided above could be one area for expansion through future research (see section on future research directions for developing reflective practice).

10.1.3 Conclusions, Implications and Recommendations for Developing the Training of PJDM Expertise

There are a number of implications which accrue for this area from my thesis. For example, the training study presented in Chapter 9 utilised current best practice (from a limited literature base) for acquiring decision making expertise, including use of a scenario-based instructional approach to address six goals: enhance perceptual skills; enrich mental models about the domain; construct a large and varied repertoire of patterns; provide a larger set of routines; provide a larger experience base of instances; and encourage an attitude of responsibility for one's own learning. The three learning tactics suggested by Phillips et al., (2004), in addition to practice and feedback, were also used to develop decision making expertise: namely, case studies (to boost vicarious experience base and enrich the mental models of the decision maker), coaching (to provide feedback and facilitate the strengthening of the learner's intuitions) and advanced organizers or instructional material (that direct attention to relevant aspects, declarative knowledge, and mental models). The results of this study were promising and suggest that this approach

could, indeed, accelerate the learning curve by providing simulations to deliberately practice decisions and judgments (as suggested by Phillips et al., 2004).

Implications and recommendations include the use of these approaches, goals and tactics more widely in the training of developing practitioners (for example as teaching methods on postgraduate courses and possibly as a requirement for BASES/BPS accreditation). A key distinction is that this method does not attempt to dramatically revise decision processes (by following normative standards or eliminating biases for example) but rather, seeks to improve the ‘quality’ of PJDM through facilitation of domain-specific expertise (Phillips et al., 2004). As such, this approach would seem ideal for the existing ‘broad church but lacking scripture’ environment which characterises applied sport psychology as with any other young profession.

10.2 Future Research Directions

Numerous areas which would be worthy of further discussion and research have emerged throughout this thesis. This section summaries these ideas through consideration of future research directions for developing ‘evaluation’, ‘reflective practice’ and the ‘training’ of PJDM expertise.

10.2.1 Future Research Directions for Developing Evaluation

The overview of existing formal evaluation procedures offered in Chapter 2 demonstrated that a demonstrable gap exists in the ability of these methods to comprehensively assess and represent the work of applied sport psychologists. The

implications of this conclusion are important, both in terms of quality assurance and in terms of documenting our effectiveness as practitioners.

In the debate surrounding the nature and content of evaluating consultant effectiveness, I suggest the inclusion of process measures to assess PJDM and intentions for impact (e.g., concept mapping and brief structured recall); and a range of multi-level outcome measures (e.g., session impact, the experiencing scale, and client change interviews) which can be adapted by practitioners and clients to meet the specific demands of their working context. This framework would go some way to addressing the identified gap and bring positive benefits by providing a more comprehensive evaluation of applied sport psychology support while meeting the demands of the evolving evaluation climate.

To unpack one such measure, a construct (borrowed from clinical and counselling psychology) is offered as an example of evaluation at the session end of the time scale range as an insight into where PJDM research may take us. For an intervention evaluation to be comprehensive and valid, it is essential for the client to evaluate the support. After all, evaluation by the client, the person who is seeking performance improvement (of overt and covert experiences), will assess far better (and more validly) than the practitioner or any outside observer, whether he or she has found it (Sutton, 1989); an approach which must surely resonate with the client-focused funders at UK Sport. The concept of *session impact* (the participant's evaluation of post session mood and immediate session effects) has received sharply increased attention from counselling process researchers (Mallinckrodt, 1993, 1994) and has been proposed as a link between counselling process and outcome (Stiles and Snow, 1984a). Session impact has been used in clinical and counselling psychology

as an evaluation tool for over two decades (e.g., the Session Impact Scale, Elliot and Wexler, 1994; and the Session Evaluation Questionnaire, Stiles, 1980) as a means to gauge the client's perspective on the impact and value of the session.

In applied sport psychology the concept of session impact represents one of a range of constructs which would significantly contribute to the development of current assessment and evaluation procedures. Assessment of the client's and practitioner's perspective of impact at a session, intervention and program level, along side assessment of the practitioner's *intention* for impact, would provide a unique and comprehensive method of evaluating support whilst generating insight into the crucial PJDM processes undertaken.

As this thesis has shown, PJDM literature and research has an empirically based rationale and is already effectively utilised in other branches of mainstream psychology such as clinical psychology, psychotherapy and counselling (e.g., Hill & O'Grady, 1985; Hill, 1992; Eells, 1997; 2002). As well as providing the basis for improved process measures of evaluation, the consideration of their PJDM would enhance practitioners' conceptualisation of their work and therefore additionally serve as useful professional development and review tools. This enhanced conceptualisation should, in turn, enhance confidence in professional decision making and further enable the practitioner to clarify expectations to clients in advance on what may be achieved in a given programme of work. As such, there is enormous scope to develop the measures, methods and mechanisms suggested above specifically within applied sport psychology. Post-doctoral (if/when the thesis defence is positive) research in this area could involve the development, piloting, and

validation of these methods in order to establish protocols and frameworks for practitioners to use.

10.2.2 Future Research Directions for Developing Reflective Practice

As suggested in the previous section on reflective practice, there is scope to develop a reflective practice framework which incorporates the principles of PJDM that have emerged throughout this thesis (for example, using programme, intervention and session levels of analysis to consider practitioner conceptualisation and intentions). This may go some way to providing the much needed terminology and criteria against which to reflect, which must surely be accepted as a major omission in the current usage of reflective practice, especially against the original guidance provided (and cited earlier) by Schön (1991).

Using data from such a framework would allow access to review practitioners' PJDM, including their framing, issue conceptualisation, and the formation of their intentions for impact. Schön (1991) provides some direction in this regard via frame analysis research, which studies the ways in which practitioners frame problems to help them become aware of, and subsequently criticise, their tacit frames. This idea could be further supplemented by the use of *virtual worlds* as a medium of reflection-in-action. As such, a reflective practice framework incorporating principles of PJDM could additionally serve as either a peer supervision or a professional training tool.

Other directions for research in this area include investigating reflections of long-term consultancy with practitioners from differing orientations. It is recognised that the exploration of practitioners with differing theoretical orientations is likely to

add further breadth to the findings reported in this thesis, although it is also likely that certain principles of PJDM would be of use to practitioners from the full spectrum of orientations. In any case, consideration of orientation-focused PJDM in action, coupled with tracking of actual and perceived change, would offer exciting and powerful insights into the conduct and efficacy of such interventions.

10.2.3 Future Research Directions for Developing the Training of PJDM Expertise

As suggested in Chapter 9, research which can provide a long term follow up assessment of PJDM expertise is necessary to demonstrate the enduring effect of training on higher order thinking processes. This could be conducted via a third and final case study to be completed by the participants in this study, although it would be difficult to account for differences in experience gained prior to or since completing the course.

Another area of potential interest is in exploring the ‘types’ of feedback provided to developing practitioners. For example, ‘cognitive feedback’, which consists of information about the construct relationships in the environment and the person’s perceptions of these, has been found to reliably improve judgement performance (Balzer, Doherty & O’Connor, 1989). In addition, Phillips et al., (2004) highlight differences between ‘process’ and ‘outcome’ feedback, which complement the suggested use of these terms for evaluation purposes.

Further research directions in this area are vast and varied: for example, comparisons between experts and novices, practitioners of differing orientations, and those at differing stages of their career. Since this thesis has been in progress, great advances have been made in domain-specific methodologies for accessing expert

cognition. In particular, applied cognitive task analysis (ACTA) is suggested to “assist in developing models of the problem space that practitioners face, and highlight how practitioners achieve expertise” (Gore & McAndrew, 2009, p. 219). These techniques, which include knowledge elicitation (e.g., critical decision method), data analysis (e.g. coding of incident accounts), and knowledge representation (e.g., concept maps) aspects carry huge potential for exploring PJDM expertise with greater detail (Crandall, Klein & Hoffman, 2006).

Further exploration of practitioner PJDM would allow access to knowledge representation, retrieval, and the construction of expertise (shedding light on the roles of analysis and intuition for example). This information along with increased insight into issue conceptualisation, intention formation, associated implementation and the role of mediating variables would be invaluable for training novice practitioners. As Heinrichs (2002) suggests, two of the greatest challenges of any professional education programme are to produce professionals who are capable of independent and critical thinking, and who can understand problems in order to make critical decisions in the field. It is hoped that this thesis and the papers generated from it will stimulate increased debate on these crucial topics.

10.3 Final Conclusions

It is hoped that this thesis has demonstrated the profound importance of PJDM in the professional practice of applied sport psychology for all practitioners from the novice to the expert. Importantly, the PJDM principles and theoretical concepts discussed in this thesis can be generalised and transferred across different theoretical orientations (albeit with an awareness of the core conditions of different

orientations). Any concerns regarding this transferability should be appeased by considering some of the original process literature from other domains of psychology. For example, Greenberg's (1991) research on the process of change and Hill's (1992) process model stem from psychotherapy, which has a strong humanistic underpinning. Indeed, Carl Rogers himself is generally credited with founding process research (Hill, 1992). Certainly, informal feedback from a range of practitioners on the ideas presented in published papers from this thesis has been encouraging. It is perhaps unsurprising that these psychologists have enjoyed engaging in a bit of 'metacognition', albeit thinking more about their *own* thinking rather than encouraging others' to do so. What has been more surprising is that this is not common practice amongst psychologists. For example, Bensley's (2008) article entitled "can you learn to think more like a psychologist" highlights some of the common thinking pitfalls and ways to maximise 'critical' thinking in psychology.

As 'competency-based models' are currently favoured by professional bodies for accreditation purposes (e.g., BPS, BASES) the debate surrounding required 'competencies' in professional psychology is ongoing. Here, the definition of 'competence' suggested by Kaslow (2004) seems particularly pertinent:

"competence connotes the capability of critical thinking and analysis; the successful exercise of professional judgment in assessing a situation and making decisions about what to do or not do based on that assessment; and the ability to evaluate and modify one's decisions, as appropriate, through reflective practice" (p.775).

This highlights the central role of PJDM in competent professional practice for all. In other words, just 'observing' won't provide the confirmation of competence that it is supposed to.

The importance of PJDM in professional practice is further demonstrated by the prominent (and appropriate but not evaluated) status ‘decision making’ is given in the BPS Code of Ethics and Conduct (BPS, 2009). These guidelines suggest that practitioners should generate alternative decisions (with others to act as a sounding board), make decisions after checking that the reasoning is logical, lucid and consistent, and document the process of decision making. It is hoped that the suggestions made in this thesis will support applied sport psychologists to meet these recommendations and therefore to make more aware and informed ethical decisions for the benefit of clients.

As well as the inherent interest in the emergence of PJDM expertise in applied sport psychologists, the sparse nature of the research in this area across a range of domains and professions suggests that further research has the potential to also contribute to wider professional communities and contexts. In particular, there is considerable scope to establish a greater understanding of the development of PJDM expertise in fields which involve the ‘less-predictable’ task characteristics of ‘human behaviour’ (e.g., coaching, teaching, etc).

Fortunately, the role of PJDM in the practice of helping professionals is being increasingly recognised. For example, Smith, Shanteau and Johnson (2004) state:

“Academic research generally and our society particularly have largely neglected the fact that sound judgment and decision making are the crux of many professions. By understanding and communicating what professional decision makers do and how they do it well, we make valuable contributions both to our field and to the professional community at large” (p.4).

It is hoped that this thesis has made a worthy contribution to this most important pursuit.

10.4 A Personal Review of the PhD Process

Work on this thesis began formally in January 2004, although initial reading into this area of study began some time before this. Thus, time to completion has been approximately 6 and a half years. This is somewhat longer than I had originally envisaged, especially as the first 18 months of study was as a full-time PhD student. In truth, I never really spent ‘full-time’ on this research as I was offered numerous opportunities to teach at the university and to provide applied sport psychology support to high performance athletes, which included working with athletes at the 2005 Judo World Championships in Cairo and the 2006 Commonwealth Games in Melbourne, to name a couple of the most memorable experiences.

These experiences were invaluable as they allowed me to concurrently grow as a practitioner as well as a researcher and lecturer, which was essential for writing about professional practice in applied sport psychology. My experiences of developing as a practitioner have greatly influenced the questions asked and the directions pursued in this thesis and as such, despite the long road, I wouldn’t have had it any other way. I am fortunate to have had a supervisor with the foresight and capacity to offer development opportunities in the full spectrum of roles that are now a part of my career (researcher, lecturer, and practitioner) not to mention a good deal of personal development along the way!

Since joining the staff at the university in August 2006 I have found it difficult at times to make the progress on my PhD that I desired, especially in the first two years as a new lecturer where my focus was on developing materials and resources for teaching and when prolonged staff absence meant an increased teaching workload. I got married in the summer of 2004 and despite my intention to start a

family after completing my PhD, my son Oliver, was born in October 2008 (as previously mentioned the PhD was taking longer than planned!) As such, I was on maternity leave for the academic session 2008-9 and although my PhD took a back seat at this time I was able to write the response article which is now the third paper to be published from this thesis.

It is with a great deal of pleasure that I now submit this PhD for examination. The process has taught me to set goals, move goals, be 'fluid' in my pursuit of goals, achieve goals, set more goals, and then to move them again. It has certainly been an endurance event, but I have always had the steady guiding influence of my supervisor, which remained unaffected by his move away from the university, and for which I am most thankful. I now feel that I have set up my 'springboard' from which to jump further into the world of academic research and the pursuit of knowledge. Let's hope the leap is strong, the flight is well executed and the landing is soft!

References

- AASP (2006). *Applied Sport Psychology*. Retrieved September 1 2006 from <http://www.aaasponline.org/asp/asp.php>.
- Abraham, A., & Collins, D. (1998). Declarative and procedural knowledge assessment in novice and intermediate coaches. *Journal of Sports Sciences* 16(1):70.
- Abraham, A., Collins, D. J., & Martindale, R. J. J. (2004). *Validation of a coaching schematic through expert coach consensus*. Poster presented at the British Psychological Society Annual Conference, Imperial College, London.
- Anderson, A. G. (2002). The assessment of consultant effectiveness instrument. *Sport and Exercise Psychology Section Update: A British Psychological Society Publication* (17), 4 - 7.
- Anderson, M. B. (Ed.). (2000). *Doing Sport Psychology*. Champaign, IL: Human Kinetics.
- Anderson, M. B. (2009). Performance enhancement as a bad start and a dead end: a parenthetical comment on Mellalieu and Lane. *The Sport and Exercise Scientist*, 20, 12 – 14.
- Anderson, J. R. (1983). *The Architecture of Cognition*. Cambridge, MA: Harvard University Press.
- Anderson, A. G., Knowles, Z., & Gilbourne, D. (2004.) Reflective practice for sport psychologists: Concepts, models, practical implications, and thoughts on dissemination. *The Sport Psychologist*, 18, 188-203.
- Anderson, A. G., Miles, A., Mahoney, C., & Robinson, P. (2002). Evaluating the effectiveness of applied sport psychology: Making the case for a case study approach. *The Sport Psychologist*, 16, 432-453.
- Anderson, A., Miles, A., Robinson, P., & Mahoney, C. (2004). Evaluating the athlete's perception of the sport psychologist's effectiveness: what should we be assessing? *Psychology of Sport and Exercise*, 5, 255-277.
- Auerbach, C. F., & Silverstein, L. B. (2003). *Qualitative Data: An Introduction to Coding and Analysis*. NY: New York University Press.

- Bandman, E., & Bandman, B. (1995) *Critical Thinking in Nursing*. In Girot, E. A. (2000). Graduate nurses: critical thinkers or better decision makers? *Journal of Advanced Nursing*, 31, 288 – 297.
- Barnett, R. (1987). Beyond the reflective practitioner? In Girot, E. A. (2000). Graduate nurses: critical thinkers or better decision makers? *Journal of Advanced Nursing*, 31, 288 – 297.
- BASES (2002). *Accreditation Criteria*. Retrieved October 17 2002 from <http://www.bases.org.uk/bases-prof-dev/accreditation-criteria.html>.
- BASES (2004). *Individual Accreditation*. Retrieved November 1 2004 from <http://www.bases.org.uk/newsite/accredind.asp>.
- BASES (2007). *Accreditation Criteria and Case Study Guidance Notes*. Retrieved June 26 2007 from <http://www.bases.org.uk>.
- BASES (2009). *Supervised Experience Competency Profile*. Retrieved October 19 2009 from <http://www.bases.org.uk>.
- BASES (2009). *Code of Conduct*. Retrieved October 19 2009 from <http://www.bases.org.uk>.
- Bensley, D. A. (2008). Can you learn to think like a psychologist? *The Psychologist*, 21, 128 – 129.
- Biddle, S. J. H., Bull, S. J., & Scheult, C. L. (1992). Ethical and professional issues in contemporary British sport psychology. *The Sport Psychologist*, 6, 66 – 76.
- Balzer, W. K. Doherty, M. E., & O'Connor, R. O. (1989). The effects of cognitive feedback on performance. *Psychological Bulletin*, 106, 410 – 433.
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research & Practice*, 16(3), 252-260.
- BPS/BASES (2005). Consultant effectiveness in applied sport psychology workshop advert in *Sport and Exercise Psychology Review*, 1 (2), p 39.
- BPS (2006). *Qualitative guidelines: criteria for evaluating papers using qualitative research methods*. Retrieved from www.bps.org/publications/journals.
- BPS (2008). *Generic Professional Practice Guidelines* (2nd edition). Retrieved October 19 2009 from www.bps.org.uk

- BPS (2009). *Code of Ethics and Conduct*. Retrieved October 19 2009 from www.bps.org.uk
- BPS (2010). *Types of Psychologists*. Retrieved August 3 2010 from http://bps.org.uk/careers/what-do-psychologists-do/areas/areas_home.cfm
- BPS (2010). *Qualification in Sport and Exercise Psychology (Stage 2) Candidate Handbook*. Retrieved August 3 2010 from <http://bps.org.uk>.
- Brown, R., & Kulik, J. (1977). Flashbulb memories. *Cognition*, 5(1), 73-99.
- Bruchner, K., & Schanze, S. (2004). Using concept maps for individual knowledge externalization in medical education. In A. J. Canas, J. D. Novak, F. M. Gonzalez (Eds.), *Concept maps: Theory, methodology, technology: Proceedings of the first international conference on concept mapping*. Pamplona: Spain.
- Bull, S. J. (1989). The role of the sport psychology consultant: a case study of ultra-distance running. *The Sport Psychologist*, 3, 254–264.
- Bull, S. J. (1995). Reflections on a 5-year consultancy program with the England women's cricket team. *The Sport Psychologist*, 9, 148 – 163.
- Callery, P., & Morris, T. (1993) In Holmes P.S. & Collins, D.J. (2001) The PETTLEP approach to motor imagery: A functional equivalence model for sport psychologists. *Journal of Applied Sport Psychology*, 13, 16 – 83.
- Carr, D. (1999). Professional education and professional ethics. *Journal of Applied Philosophy*, 16 (1), 33 – 46.
- Case, C., Lanier, J., & Miskel, C. (1986). The Holmes Group report: impetus for gaining professional status for teachers. *Journal of Teacher Education*, 37(4), 36–43.
- Cesna, M., & Mosier, K. (2005). Using a prediction paradigm to compare levels of expertise and decision making among critical care nurses. In H. Montgomery, R. Lipshitz, & B. Brehmer (eds.). *How Professionals Make Decisions*. London: LEA.
- Chase, W. G., & Simon, H. A. (1973). Perception in chess. *Cognitive Psychology*, 4, 55-81.
- Chi, M. T., Feltovich, P. J., & Glaser, R. (1981). Categorization and representation of physics problems by experts and novices. *Cognitive Science*, 5(2), 121-152.

- Cockerill, I., & Tribe, R. (2002). Counselling considerations in sport and exercise. In: *Counselling in Sport and Exercise Contexts. A British Psychological Society Publication*. (pp 6 – 17).
- Collins, A., Brown, S.J., & Holum, A. (1991). Cognitive apprenticeship: making thinking visible. *American Education*, 3, 1-18.
- Collins, D. & Collins, J. (In press). Putting them together: skill packages to optimise team/group performance. In D. Collins, A. Button and H. Richards (Eds.). *Performance Psychology: A Practitioner's Guide*. Oxford: Elsevier
- Conley, S. C. (1988). Reforming paper pushers and avoiding free agents: the teacher as a constrained decision maker. *Education Administration Quarterly*, 23(4), 394 – 404.
- Conlon, T. (2004). 'But is our concept map any good?': Classroom experiences with the reasonable fallible analyzer. In A. J. Canas, J. D. Novak, F. M. Gonzalez (Eds.), *Concept maps: theory, methodology, technology: proceedings of the first international conference on concept mapping*. Pamplona: Spain.
- Cooksey, R. (2000). Judgment analysis, think-aloud protocols, cause mapping, image theory and neural network simulation. In *The Brunswick Society Newsletter*. Retrieved October 21 2004 from <http://www.albany.edu/cpr/brunswick/newsletters/newsletter2000/jatap.html>
- Corbin, J., & Holt, N. L. (2005). Grounded Theory. In B. Somekh & C. Lewin (Eds.). *Research Methods in the Social Sciences*. Thousand Oaks, CA: Sage.
- Cormier, W. H., & Cormier, S. L. (1991). *Interviewing Strategies for Helpers. Fundamental Skills and Cognitive Behavioural Interventions* (3rd ed). Pacific Grove, CA: Brooks/Cole.
- Coutu, D., & Kauffman, C. (2009). What can coaches do for you? *Harvard Business Review*. 91 – 97.
- Cox, D. (2002). The psychological rehabilitation of a severely injured rugby player. In I. Cockerill (Ed.). *Solutions in Sport Psychology*. UK: Thomson.
- Craik, F. M., & Lockhart, R. S. (1972). Levels of processing: a framework for memory. *J. verb. Learn. Verb. Behav.*, 11, 671-684.
- Crandall, B., Klein, G., & Hoffman, R. R. (2006). *Working minds: a practitioner's guide to cognitive task analysis*. Cambridge, MA: MIT Press.

- Cropley, B., Miles, A., Hanton, S., & Niven, A. (2007). Improving the delivery of applied sport psychology support through reflective practice. *The Sport Psychologist*, 21, 475 – 494.
- Curtner-Smith, M. D. (1999). The more things change the more they stay the same: Influencing teachers' interpretations and delivery of national curriculum physical education. *Sport, Education and Society*, 4 (1), 75-97.
- Daley, B. (2004). Using concept maps in qualitative research. In A. J. Canas, J. D. Novak, F. M. Gonzalez (Eds.), *Concept maps: theory, methodology, technology: proceedings of the first international conference on concept mapping*. Pamplona: Spain.
- Danish, S. J., Petitpas, A. J., & Hale, B. D. (1992). A developmental-educational intervention model of sport psychology. *The Sport Psychologist*, 6, 403 – 415.
- Denzin, N. & Lincoln, Y. (Eds.) (1994). *Handbook of Qualitative Research*.: London: Sage Publications.
- Dryden, W. (1989). The therapeutic alliance as an integrating framework. In W. Dryden (Ed). *Key Issues for Counselling in Action*. London: Sage Publications.
- Dryden, W., & Reeves, A. (Eds). (2008). *Key Issues for Counseling in Action*. London: Sage Publications.
- Eddy, D. M. (1998). Performance measurement: problems and solutions. *Health Affairs*, 17(4), 7 – 25.
- Eells, T. D. (1997). Psychotherapy case formulation: History and current status. In T. D. Eells (Ed.), *Handbook of psychotherapy case formulation*. New York: Guilford Press.
- Eells, T. D. (2002). Formulation. In M. Hersen & W. Sledge (Eds.), *The Encyclopedia of Psychotherapy* (pp. 815-822). New York: Academic Press.
- Eells, T. D., Lombart, K. G., Kendjelic, E. M., Turner, L. C., & Lucas, C. (2005). The quality of psychotherapy case formulations: a comparison of expert, experienced, and novice cognitive-behavioural and psychodynamic therapists. *Journal of Consulting and Clinical Psychology*, 73 (4), 579 - 589.

- Egan, G. (2002) *The Skilled Helper: A Problem-Management Approach to Helping* (7thEd). Brooks/Cole.
- Einhorn, H. J. (1972). Expert measurement and mechanical combination. *Organizational Behavior and Human Performance*, 7, 86-106.
- Einhorn, H. J. (1974). Expert judgment: some necessary conditions and an example. *Journal of Applied Psychology*, 59, 562-571.
- Elliott, R. (1986). Interpersonal Process Recall (IPR) as a psychotherapy process research method. In L. Greenberg & W. Pinsof (Eds.). *The Psychotherapeutic Process* (pp. 503-527). New York: Guilford.
- Elliott, R. (1993). *Comprehensive process analysis: mapping the change process in psychotherapy*. Unpublished research manual. (Available from R. Elliott, Department of Psychology, Department of Psychology, University of Toledo.)
- Elliot, R., & Shapiro, D. A. (1988). Brief structured recall: a more efficient method for identifying and describing significant therapy events. *British Journal of Medical Psychology*, 61, 141-153.
- Elliott, R., Slatick, E., & Urman, M. (2001). Qualitative change process research on psychotherapy: alternative strategies. In J. Frommer and D. Rennie (Eds.), *The Methodology of Qualitative Psychotherapy Research*. Lengerich, Germany: Pabst Science Publishers.
- Elliott, R., & Wexler, M. M. (1994). Measuring the impact of sessions in process-experiential therapy of depression: the session impacts scale. *Journal of Counseling Psychology*, 41(2), 166 - 174.
- Ellis, A. (2001). *Feeling Better, Getting Better, Staying Better: Profound self-help therapy for your emotions*. California: Impact Publishers Inc.
- Entwistle, N., & Waterston, S. (1988). Approaches to studying and levels of processing in university students. *British Journal of Educational Psychology*, 58, 258-265.
- Erickson, M. H. (1974). Foreword. In P. Watzlawick, J. H. Weakland, & R. Fisch, *Change: Principles of problem formation and problem resolution* (p. ix). New York, NY: W. W. Norton.

- Eubank, M., & Cain, A. (2009). Looking to the future of the DSEPTC. *Sport and Exercise Psychology Review*, 5, 39 – 43.
- Evans, J. St. B. T. (2008). Dual-processing accounts of reasoning, judgment, and social cognition. *Annu. Rev. Psychol*, 59, 255 – 278.
- Evans, L., Fleming, S., & Hardy, L. (2000). Situating action research: a response to Gilbourne. *The Sport Psychologist*, 14, 296-303.
- Evans, L., Hardy, L., & Fleming, S. (2000). Intervention strategies with injured athletes. *The Sport Psychologist*, 14, 188 – 206.
- Evetts, J. (2001). New directions in state and international professional occupations: Discretionary decision-making and acquired regulation. Paper presented at: SASE 13th Annual Meeting on Socio-Economics Knowledge: The New Wealth of Nations, University of Amsterdam, The Netherlands.
- Fifer, A., Henschen, K., Gould, D., & Ravizza, K. (2008). What works when working with athletes. *The Sport Psychologist*, 22, 356 – 377.
- Fischhoff, B. (1982). Debiasing. In D. Kahneman, P. Slovic & A. Tversky (eds.). *Judgment Under Uncertainty: Heuristics and Biases*. Cambridge, MA: Cambridge University Press.
- Frederick, S. (2005). Cognitive reflection and decision making. *Journal of Economic Perspectives*, 19(4), 25–42.
- Funke, J. (2001). Dynamic systems as tools for analysing human judgement. *Thinking and Reasoning*, 7 (1), 69-89.
- Gardner, F. L., & Moore, Z. E. (2005). Using a case formulation approach in sport psychology consulting. *The Sport Psychologist*, 19, 430–445.
- Gardner, F. L., & Moore, Z. E. (2006). *Clinical Sport Psychology*. Champaign, IL: Human Kinetics.
- Gelso, C.J., & Fretz, B. (2001). *Counseling Psychology*, (2nd ed.): Brooks Cole.
- Gigerenzer, G. (1989). Cited in Shanteau, J. (1992). Competence in experts: The role of task characteristics. *Organizational Behavior and Human Decision Processes*, 53, 252 – 266.
- Giges, B., & Petitpas, A. (2000). Brief contact interventions in sport psychology. *The Sport Psychologist*, 14, 176 – 187.

- Giacobbi, P. R., Poczwadowski, A., & Hagger, P. (2005). A pragmatic research philosophy for applied sport psychology. *The Sport Psychologist*, 19, 18 – 31.
- Gilbourne, D. (1999). Collaboration and reflection: adopting action research themes and processes to promote adherence to changing practice. In S. Bull (Ed.). *Adherence Issues in Sport and Exercise* (pp. 239 – 262). Chichester, England: Wiley.
- Gilbourne, D. (2000). Searching for the nature of action research: a response to Evans, Hardy, and Fleming. *The Sport Psychologist*, 14, 207 – 217.
- Giot, E. A. (2000). Graduate nurses: critical thinkers or better decision makers? *Journal of Advanced Nursing*, 31, 288 – 297.
- Glaser, R. (1996). Changing the agency for learning: acquiring expert performance. In K. A. Ericsson (ed.). *The Road to Excellence*. (pp. 303 – 311). Mahwah, NJ: Erlbaum.
- Glaser, R., & Chi, M. T. H. (1988). Overview. In M. T. H. Chi, R. Glaser, and M. J. Farr (Eds.). *The Nature of Expertise*. Mahwah, NJ: LEA
- Glen, S. (1993). Cited in Giot, E. A. (2000). Graduate nurses: critical thinkers or better decision makers? *Journal of Advanced Nursing*, 31, 288 – 297.
- Gore, J., & McAndrew, C. (2009). Accessing expert cognition. *The Psychologist*, 22(3), 218 – 219.
- Griffey, D. C., & Housner, L. D. (1991). Differences between experienced and inexperienced teachers' planning decisions, interactions, student engagement and instructional climate. *Research Quarterly for Exercise and Sport*, 62 (2), 196-204.
- Greenberg, L. S. (1986). Change process research. *Journal of Consulting and Clinical Psychology*, 54(1), 4 - 9.
- Greenberg, L. S. (1991). Research on the process of change. *Psychotherapy Research*, 1(1), 3-16.
- Guba, E. (1990). Cited in N. Denzin & Y. Lincoln (Eds.) (1994). *Handbook of Qualitative Research*. London: Sage.
- Hamm, R. M., (1988). Clinical intuition and clinical analysis: expertise and the cognitive continuum. In J. Dowie and A. Elstein (Eds.). *Professional Judgment: A Reader in Clinical Decision Making*. Cambridge: OU Press.

- Hammond, K. R. (1966). Cited in Shanteau, J. (1992). Competence in experts: the role of task characteristics. *Organizational Behavior and Human Decision Processes*, 53, 252 – 266.
- Hardy, L., & Jones, G. (1994). Current issues and future directions for performance-related research in sport psychology. *Journal of Sport Sciences*, 12, 61 – 90.
- Hardy, L., & Parfitt, G. (1994). The development of a model for the provision of psychological support to a national squad. *The Sport Psychologist*, 8, 126-142.
- Haskell, R. E. (2001). *Transfer of Learning: Cognition, Instruction and Reasoning*. CA: Academic Press.
- Hays, K. F. (2006). Being fit: the ethics of practice diversification in performance psychology. *Professional Psychology: Research and Practice*, 37 (3), 223 – 232.
- Hazler, R. J. (2001). Core conditions of the cognitive-behavioural environment. In Hazler, R. J., & Barwick, N. (2001). *The Therapeutic Environment*. Buckinghamshire: Open University Press.
- Hazler, R. J., & Barwick, N. (2001). *The Therapeutic Environment*. Buckinghamshire: Open University Press.
- Heil, J. (Ed). (1993). *Psychology of Sport Injury*. Champaign, IL: Human Kinetics.
- Heil, J., & Henschen, K. (1996). Assessment in sport and exercise psychology. In J. L. Van Raalte & B. W. Brewer (Eds.), *Exploring sport and exercise psychology* (pp. 229-256). Washington, D.C: American Psychological Association.
- Heinrichs, K. I. (2002). Problem-based learning in entry-level athletic training professional-education programs: A model for developing critical-thinking and decision-making skills. *Journal of Athletic Training*, 37 (4 Supplement), S-189-S-198.
- Hill, C. E., & O'Grady, K. E. (1985). List of therapist intentions illustrated in a case study and with therapists of varying theoretical orientations. *Journal of Counseling Psychology*, 32, 3 - 22.

- Hill, C. E. (1992). An overview of four measures developed to test the hill process model: therapist intentions, therapist response modes, client reactions, and client behaviours. *Journal of Counseling & Development*, 70, 728 - 739.
- Hoffrage, U., & Gigerenzer, G. (1998). Using natural frequencies to improve diagnostic inferences. *Academic Medicine*, 73, 538-540.
- Høigaard, R., & Tore Johansen, B. (2004). The solution-focused approach in sport psychology. *The Sport Psychologist*, 18, 218-228.
- Holder, T. (1997). A theoretical perspective of performance evaluation with a practical application. In R. Butler (Ed.), *Sports Psychology in Performance*. (pp. 68-88). Oxford, UK: Butterworth Heinemann.
- Holmes, P. S., & Collins, D. J. (2001). The PETTLEP approach to motor imagery: a functional equivalence model for sport psychologists. *Journal of Applied Sport Psychology*, 13, 16 – 83.
- Husted, G. L., & Husted, J. H. (1995) *Ethical Decision Making in Nursing*. Mosby Inc.,
- Ievleva, L., & Orlick, T. (1993). Mental paths to enhanced recovery from a sports injury. In D. Pargman (Ed). *Psychological Bases of Sport Injuries*. Morgantown: FIT Inc.
- Issac, A., Marks, D. F., & Russell, D. G. (1986). In Perry, C., & Morris, T. (1995) Mental imagery in sport. In T. Morris & J. Summers (Eds), *Sport Psychology: Theory, applications and issues*. Queensland: John Wiley & Sons.
- Jackson, S., & Csikszentmihalyi, M. (1999). *Flow in Sports: The Keys to Optimal Experiences and Performances*. Champaign, IL: Human Kinetics.
- Jeannerod, M. (1994). The representing brain: neural correlates of motor intention and imagery. *Behavioural and Brain Sciences*, 17, 187-245.
- Jeannerod, M. (1997). *The cognitive neuroscience of action*. Oxford, UK: Blackwell Publishers Ltd.
- Jenkins, H. M. (1985). Cited in Girot, E. A. (2000). Graduate nurses: critical thinkers or better decision makers? *Journal of Advanced Nursing*, 31, 288 – 297.

- Jones, S. A., & Brown, L. (1991). Cited in Girot, E. A. (2000). Graduate nurses: critical thinkers or better decision makers? *Journal of Advanced Nursing*, 31, 288 – 297.
- Jowett, S. (2003). When the honeymoon is over: a case study of a coach - athlete relationship. *The Sport Psychologist*, 17, 444-460.
- Jowett, S. (2006). Interpersonal and structural features of Greek coach-athlete dyads performing in individual sports. *Journal of Applied Sport Psychology*, 181, 69-81.
- Jowett, S., & Cockerill, I.M. (2003). 'Olympic Medallists' perspective of the athlete-coach relationship. *Psychology of Sport and Exercise*, 4, 313-331.
- Jowett, S., & Meek, G.A. (2000). The coach - athlete relationship in married couples: An exploratory content analysis. *The Sport Psychologist*, 14, 157-175.
- Kahneman, D., & Frederick, S. (2002). Cited in Kahneman, D., & Klein, G. (2009). Conditions for intuitive expertise: a failure to disagree. *American Psychologist*, 64(6), 515-526.
- Kahneman, D., & Klein, G. (2009). Conditions for intuitive expertise: a failure to disagree. *American Psychologist*, 64(6), 515-526.
- Kahneman, D., & Tversky, A. (1972). Subjective probability: a judgment of representativeness. *Cognitive Psychology*, 3, 430–454.
- Kahneman, D., & Tversky, A. (1982). On the study of statistical intuitions. *Cognition*, 11, 123 – 41.
- Kaslow, N. J. (2004). Competencies in professional psychology. *American psychologist*. 774 – 781.
- Kellmann, M., & Beckmann, J. (2003). Research and intervention in sport psychology: new perspectives for an inherent conflict. *International Journal of Sport and Exercise Psychology*, 1, 13-26.
- Kelly, M. J. (2004). Qualitative evaluation research. In C. Seale, G. Gobo, J. F. Gubrium & D. Silverman (Eds.), *Qualitative research practice*. (pp 521–535). London: Sage Publications.
- Kendjelic, E. M., & Eells, T. D. (2005). Generic psychotherapy case formulation training improves formulation quality. *Psychotherapy*, 44, 66–77.

- Klein, G. A. (1998). *Sources of power: how people make decisions*. Cambridge, MA: MIT Press.
- Klein, G. A. (2004). *The Power of Intuition*. Doubleday/Currency
- Klein, G. A. (2009). *Streetlights and shadows: searching for the keys to adaptive decision making*. MIT Press.
- Klein, G. A., Calderwood, R., & Clinton-Cirocco, A. (1986). Cited in Phillips, J. K., Klein, G., & Sieck, W. R. (2004). Expertise in judgment and decision making: a case for training intuitive decision skills. In D. K. Koehler and N. Harvey (Eds.). *Blackwell Handbook of Judgment and Decision Making*. Wiley-Blackwell.
- Klein, M. H., Mathieu, E. T., Gendlin, E. T., & Kiesler, D. J. (1969). *The experiencing scale: a research and training manual, Volume I*. Wisconsin Psychiatric Institute.
- Klein, G., & Militello, L. (2005). The knowledge audit as a method for cognitive task analysis. In H. Montgomery, R. Lipshitz, & B. Brehmer (Eds.). *How Professionals Make Decisions*. LEA: London.
- Kreber, C. (2002). Teaching excellence, teaching expertise, and the scholarship of teaching. *Innovative Higher Education*, 27(1) 5-23.
- Kremer, J., & Scully, D. (1998). What applied sport psychologists often don't do: on empowerment and independence. In: *What Sport Psychologists Do*. A British Psychological Society Publication, pp21 - 27.
- Koehler, D. K., & Harvey, N. (Eds.). (2007). *Blackwell Handbook of Judgment and Decision Making*. Wiley-Blackwell.
- Kottler, J. A. (1999). *Nuts & Bolts of Helping*. Boston, MA: Allyn & Bacon.
- Kubler-Ross, E. (1969). *On Death and Dying*. New York: Macmillan.
- Lambert, M. J., Dejulio, S.S., & Stein, D.M. (1978). Therapist interpersonal skills: process, outcome, methodological considerations, and recommendations for future research. *Psychological Bulletin*, 85, 467-489.
- Lang, P. J. (1977) In Perry, C., & Morris, T. (1995) Mental imagery in sport. In T. Morris & J. Summers (Eds), *Sport Psychology: Theory, applications and issues*. Queensland: John Wiley & Sons.

- Lang, P. J. (1979). A bio-informational theory of emotional imagery. *Psychophysiology*, 17, 495-512.
- Lavallee, D. (2005). The effect of a life development intervention on sports career transition adjustment. *The Sport Psychologist*, 19, 193-202.
- Lazarus, A. A. (1981). The Practice of multi-modal therapy. In Murphy, S.M.(Ed.) (1995). *Sport Psychology Interventions*. Human Kinetics. Champaign. IL.
- Linder, D. E., Brewer, B. W., Van Raalte, J. L., & De Lange, N. (1991). A negative halo for athletes who consult sport psychologists: replication and extension. *Journal of Sport & Exercise Psychology*, 13, 133 – 148.
- Lindsay, P., Breckon, J. D., Thomas, O., & Maynard, I. W. (2007). In pursuit of congruence: a personal reflection on methods and philosophy in applied practice. *The Sport Psychologist*, 21, 335 – 352.
- Lipshitz, R. (1993). Decision making as argument driven action. In Klein, G.A., J. Orasanu, R. Calderwood, & C. Zsombok (Eds.), *Decision Making in Action: Models and Methods*, 172-181). Norwood, NJ: Ablex Publishing.
- Lipshitz, R. (1997). Cited in Cesna, M., & Mosier, K. (2005). Using a prediction paradigm to compare levels of expertise and decision making among critical care nurses. In H. Montgomery, R. Lipshitz, & B. Brehmer (eds.). *How Professionals Make Decisions*. London: LEA.
- McTaggart, R., Henry, H., & Johnson, E. (1997). Cited in Gilbourne, D. (2000). Searching for the nature of action research: a response to Evans, Hardy, and Fleming. *The Sport Psychologist*, 14, 207 – 217.
- Mallinckrodt, B. (1993). Session impact, working alliance, and treatment outcome in brief counseling. *Journal of Counseling Psychology*, 40(1), 25-32.
- Mallinckrodt, B. (1994). Session impact in counseling process research: comment on Elliott and Wexler (1994) and Stiles et al. (1994). *Journal of Counseling Psychology*, 41(2), 186-190.
- Manning, K. (1997). Cited in Sparkes, A. C. (1998). Validity in qualitative enquiry and the problem of criteria: implications for sport psychology. *The Sport Psychologist*, 12, 363 – 386.
- Martindale, A., & Collins, D. (2005). Professional judgment and decision making: the role of intention for impact. *The Sport Psychologist*, 19(3), 303-317.

- Martindale, A. & Collins, D. (2007). Enhancing the evaluation of effectiveness with professional judgment and decision making. *The Sport Psychologist*, 21(4), 458 – 474.
- Martindale, A. & Collins, D. (2010). But *why* does what works work? a response to Fifer, Henschen, Gould, and Ravizza, 2008. *The Sport Psychologist*, 24, 113 - 116.
- Martindale, R., Collins, D., & Daubney, J. (2005). Talent development: a guide for practice and research within sport. *Quest*, 57, 353-375.
- Marton, F., & Saljo, R. (1984). Approaches to learning. In F. Marton, Hounsell, D. J., and Entwistle, N. J. (Ed). , *The Experience of Learning*. Edinburgh: Scottish Academic Press.
- Mascarenhas, D. R. D., Collins, D., Mortimer, P., & Morris, R. L. (2005). A naturalistic approach to training coherent decision-making in rugby union referees. *The Sport Psychologist*, 19, 2.
- Meehan, H. L., Bull. S. J., Wood, D. M., & James. D. V. B. (2004). The overtraining syndrome: a multicontextual assessment. *The Sport Psychologist*, 18(2) 154-171.
- Meichenbaum, D., & Turk, D. C. (1987). Cited in Petitpas, A. J., Giges, B., & Danish, S. J. (1999). The sport psychologist - athlete relationship: implications for training. *The Sport Psychologist*, 13, 344 - 357.
- Menand, L. (2005). Everybody's an expert: putting predictions to the test. *The New Yorker*, December 5th 2005.
- Mills, J., Bonner, A., & Francis, K. (2006). The development of constructivist grounded theory. *International Journal of Qualitative Methods*, 5, 1 – 10.
- Montgomery, H. (2005). The psychology of economic forecasting: a possibility for cooperation between judgment and decision making and naturalistic decision making theories? In H. Montgomery, R. Lipshitz, & B. Brehmer (Eds.). (2005). *How Professionals Make Decisions*. London: LEA.
- Montgomery, H., Lipshitz, R., & Brehmer, B. (Eds.). (2005). *How Professionals Make Decisions*. London: LEA.

- Moran, A. P. (2004). Helping athletes to cope with injury: from theory to practice. In: *Sport and Exercise Psychology: A Critical Introduction*. London: Routledge.
- Murphy, S.M., & Murphy, A.I. (1992). Sport Psychology: Performance enhancement for athletes. In Murphy, S.M. (Ed.) (1995). *Sport Psychology Interventions*. Human Kinetics. Champaign. IL.
- Mussweiler, T., & Strack, F. (2000). Cited in Kahneman, D., & Klein, G. (2009). Conditions for intuitive expertise: a failure to disagree. *American Psychologist*, 64(6), 515-526.
- Nasseh, B. (2004). *Continuing Professional Education Models*. Retrieved 9th November 2004 from <http://www.bsu.edu/classes/nasseh/bn100/profess.html>
- Nowotny, H. (2000). Transgressive competence: the narrative of expertise. *European Journal of Social Theory*, 3 (1), 5 – 21.
- O'Conner, D. L., Johnson, T. E., & Khalil, M. K. (2004). Measuring team cognition: concept mapping elicitation as a means of constructing team shared mental models in an applied setting. In A. J. Canas, J. D. Novak, F. M. Gonzalez (Eds.), *Concept maps: theory, methodology, technology: proceedings of the first international conference on concept mapping*. Pamplona: Spain.
- Osachuk, T. A., & Cairns, S. L. (1995). Cited in Petitpas, A. J., Giges, B., & Danish, S. J. (1999). The sport psychologist - athlete relationship: implications for training. *The Sport Psychologist*, 13, 344 - 357.
- Palmer, C.L., Burwitz, L., Smith, N.C., & Collins, D.J. (1999). Adherence to fitness training of elite netball players: a naturalistic enquiry. *The Sport Psychologist*, 13(3), 313-333.
- Palmer, C. L. (2005). Changing athletes' behaviour: lessons learnt. *The Sport and Exercise Scientist*, 3, 12-13.
- Partington, J., & Orlick, T. (1987). The sport psychology consultant evaluation form. *The Sport Psychologist*, 1, 309 - 317.
- Patel, V. L., & Ramoni, M. F. (1997). Cognitive models of directional inference in expert medical reasoning. In P. J. Feltovich, K. M. Ford, and R. R. Hoffman (Eds.) *Expertise in Context*. Cambridge, MA: MIT Press.

- Patton, M. (1990). *Qualitative Evaluation Methods* (2nd Ed.). Beverly Hills, CA: Sage.
- Perna, F., Neyer, M., Murphy, S. M., Ogilvie, B. C., & Murphy, A. (1995). Consultations with sport organizations: a cognitive-behavioral model. In S. M. Murphy (Ed.). *Sport Psychology Interventions*. Human Kinetics: Champaign: IL.
- Perry, C., & Morris, T. (1995) Mental imagery in sport. In T. Morris & J. Summers (Eds), *Sport Psychology: Theory, applications and issues*. Queensland: John Wiley & Sons.
- Peshkin, A. (1993). The goodness of qualitative research. *Educational Researcher*, 22, 23-29.
- Petitpas, A. J., Giges, B., & Danish, S. J. (1999). The sport psychologist - athlete relationship: implications for training. *The Sport Psychologist*, 13, 344 - 357.
- Phillips, J. K., & Battaglia, D. A. (2003). Instructional methods for training sense-making skills. In Phillips, J. K., Klein, G., & Sieck, W. R. (2004). Expertise in judgment and decision making: a case for training intuitive decision skills. In D. K. Koehler and N. Harvey (Eds.). *Blackwell Handbook of Judgment and Decision Making*. Wiley-Blackwell.
- Phillips, J. K., Klein, G., & Sieck, W. R. (2004). Expertise in judgment and decision making: a case for training intuitive decision skills. In D. K. Koehler and N. Harvey (Eds.). *Blackwell Handbook of Judgment and Decision Making*. Wiley-Blackwell.
- Poczwadowski, A., Sherman, C. P., & Henschen, K. P. (1998). A sport psychology delivery heuristic: building on theory and practice. *The Sport Psychologist*, 12, 191 - 207.
- Poczwadowski, A., Sherman, C., & Ravizza, K. (2004). Professional philosophy in the sport psychology service: building theory on practice. *The Sport Psychologist*, 18, 445-463.
- Ravizza, K. (1988). Gaining entry with athletic personnel for season-long consulting. *The Sport Psychologist*, 2, 243-254.

- Reagan, T., Case, K., Case, C. W., & Freiberg, J. (1993). Reflecting on “reflective practice”: implications for teacher evaluation. *Journal of Personnel Evaluation in Education*, 6, 263–277.
- Rice, L., & Greenberg, L. (1984). *Patterns of change: intensive analysis of psychotherapy process*. New York: Guilford Press.
- Richards, P., Mascarenhas, D., & Collins, D. (2009). Implementing reflective practice approaches with elite team athletes: parameters of success. *Reflective Practice*, 10, 353 – 363.
- Rogers, C. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, 21, 95 - 103.
- Ross, D. (1990). Programmatic structures for the preparation of the reflective practitioner. In R. Clift, W. Houston, & M. Pugach (Eds.). *Encouraging reflective practice in education: An analysis of issues and problems*. New York: Teachers College Press.
- Rotunno, R., Senarega, D., & Reggiani, E. (2004). Psychological support in top level sailing. *International Journal of Sport Psychology*, 35, 13–22.
- Ruiz-Primo, M. A. (2004). Examining concept maps as an assessment tool. In A. J. Canas, J. D. Novak, F. M. Gonzalez (Eds.), *Concept maps: theory, methodology, technology: proceedings of the first international conference on concept mapping*. Pamplona: Spain.
- Schaffer, N. D. (1983). In Eells, T. D., Lombart, K. G., Kendjelic, E. M., Turner, L. C., & Lucas, C. (2005). The quality of psychotherapy case formulations: a comparison of expert, experienced, and novice cognitive-behavioural and psychodynamic therapists. *Journal of Consulting and Clinical Psychology*, 73 (4), 579 - 589.
- Schmidt, R. A., & Wrisberg, C. A. (2000). *Motor Learning and Performance: A Problem-Based Learning Approach* (2nd Ed.). Human Kinetics. Champaign: IL.
- Schön, D. (1983). *The Reflective practitioner: How Practitioners Think in Action*. San Francisco: Harper Collins.
- Schön, D. (1991). *The Reflective Practitioner: How Professionals Think in Action*. Arena: NY.

- Schon, D. (1987). *Educating the Reflective Practitioner*. San Francisco: Josey Bass.
- Sexton, T. L., & Whiston, S. C. (1994). The status of the counseling relationship: an empirical review, theoretical implications, and research directions. *The Counseling Psychologist*, 22, 6 - 78.
- Shanteau, J. (1992). Competence in experts: the role of task characteristics. *Organizational Behavior and Human Decision Processes*, 53, 252 – 266.
- Shanteau, J. (1995). Expert judgment and financial decision making. In B. Green (Ed.), *Risky Business* (pp. 16-32). Stockholm: University of Stockholm School of Business.
- Shertzer, B. S., & Stone, S. C. (1968). *Fundamentals of Counseling*. Boston: Houghton Mifflin.
- Simon, H. A. (1957). Cited in Phillips, J. K., Klein, G., & Sieck, W. R. (2004). Expertise in judgment and decision making: a case for training intuitive decision skills. In D. K. Koehler and N. Harvey (Eds.). *Blackwell Handbook of Judgment and Decision Making*. Wiley-Blackwell.
- Simon, H. A. (1992). Cited in Kahneman, D., & Klein, G. (2009). Conditions for intuitive expertise: A failure to disagree. *American Psychologist*, 64(6), 515-526.
- Simon, H. A., & Associates. (1986). Decision Making and Problem Solving. *Research Briefings 1986: Report of the Research Briefing panel on Decision Making and Problem Solving*. Washington, DC. National Academy Press.
- Simons, J. P., & Anderson, B. M. (1995). The development of consulting practice in applied sport psychology: some personal perspectives. *The Sport Psychologist*, 9, 499 - 468.
- Smith, J.A. (1995) Semi structured interviewing and qualitative analysis. In: J. A. Smith, R. Harre., & L. Van Langenhove. (Eds.) *Rethinking Methods in Psychology*. London: Sage.
- Smith, K., Shanteau, J., & Johnson, P. (2004). *Psychological investigations of competence in decision making*. Cambridge: AUS.
- Smith, N., & Moore, P. (2005). Evaluating practice in sport and exercise science. *The Sport and Exercise Scientist*, 3, 28-29.

- Sparkes, A. C. (1998). Validity in qualitative enquiry and the problem of criteria: implications for sport psychology. *The Sport Psychologist*, 12, 363 – 386.
- Stiles, W. B. (1980). Measurement of the impact of psychotherapy sessions. *Journal of Consulting and Clinical Psychology*, 48, 176 - 185.
- Stiles, W. B., & Snow, J. S. (1984a). Counseling session impact as viewed by novice counselors and their clients. *Journal of Consulting and Clinical Psychology*, 34, 414 – 424.
- Strauss, A., & Corbin, J. (1998). Cited in Mills, J., Bonner, A. & Francis, K. (2006). The development of constructivist grounded theory. *International Journal of Qualitative Methods*, 5, 1 – 10.
- Strean, W. B. (1998). Possibilities for qualitative research in sport psychology. *The Sport Psychologist*, 12, 333-345.
- Strean, W. B., & Roberts, G. C. (1992). Future directions in applied sport psychology research. *The Sport Psychologist*, 6, 55 - 65.
- Sutton, C. (1989). The evaluation of counselling: a goal-attainment approach. In W. Dryden (Ed.) *Key Issues for Counselling in Action*. London: Sage Publications.
- Tetlock, P. (2005). *Expert Political Judgment: How Good Is It? How Can We Know?* Princeton.
- Thorburn, M., & Collins, D. (2003). The effects of an integrated curriculum model on teachers' pedagogy practices. *European Physical Education Review*, 9(2), 187-211.
- Tinning, R. (1992). Cited in Gilbourne, D. (2000). Searching for the nature of action research: a response to Evans, Hardy, and Fleming. *The Sport Psychologist*, 14, 207 – 217.
- Tod, D. (2007). The long and winding road: professional development in sport psychology. *The Sport Psychologist*, 21, 94 – 108.
- Tversky, A., & Kahneman, D. (1971). Cited in Kahneman, D., & Klein, G. (2009). Conditions for intuitive expertise: a failure to disagree. *American Psychologist*, 64(6), 515-526.
- UK Sport, (2010). *Core Responsibilities*. Retrieved on August 3 2010 from <http://www.uksport.gov.uk/pages/about-uk-sport/>

- USOC, Sports Psychology Services. (2007). *What We Do*. Retrieved on October 3 2007 from <http://www.teamusa.org/resources/teamusanet/athlete-services/usoc-sport-psychology-services>
- Van Manen, J. (1977). Linking ways of knowing with ways of being practical. *Curriculum Inquiry*, 6, 205–208.
- Van Raalte, J. L. Brewer, B. W., Brewer, D. D., & Linder, D. E. (1992). NCAA division II college football players' perceptions of an athlete who consults a sport psychologist. *Journal of Sport & Exercise Psychology*, 14, 273-282.
- Vealy, R., & Garner-Holman, M. (1998). Applied sport psychology: measurement issues. In J. L. Duda (Ed.), *Advances in sport and exercise psychology measurement* (pp. 433-466). Morgantown, WV: Fitness Information Technology.
- Watson, G., & Glaser, W. M. (1991). Cited in Girot, E. A. (2000). Graduate nurses: critical thinkers or better decision makers? *Journal of Advanced Nursing*, 31, 288 – 297.
- Weiss, M. R. (1991). Psychological skill development in children and adolescents. *The Sport Psychologist*, 5, 335 - 354.
- White, N., Beardslee, D., Peters, D., & Supples, J. (1990). Cited in Girot, E. A. (2000). Graduate nurses: critical thinkers or better decision makers? *Journal of Advanced Nursing*, 31, 288 – 297.
- Wilmot, W. W. (1975). Cited in Jowett, S. (2003). When the honeymoon is over: a case study of a coach - athlete relationship. *The Sport Psychologist*, 17, 444-460.
- Yates, J. F. (2003) Cited in Yates, J. F., & Tschirhart, M. D. (2006). Decision-Making Expertise. In K. A. Ericsson, N. Charness, R. R. Hoffman, and P. J. Foltovich (Eds.). *The Cambridge Handbook of Expertise and Expert Performance*. Cambridge University Press.
- Yates, J. F., & Tschirhart, M. D. (2006). Decision-Making Expertise. In K. A. Ericsson, N. Charness, R. R. Hoffman, and P. J. Foltovich (Eds.). *The Cambridge Handbook of Expertise and Expert Performance*. Cambridge University Press.

- Yopp, H., & Guillaume, A.M. (1999). Preparing pre-service teachers for collaboration. *Teacher Education Quarterly*, 26(1), 5-19.
- Young, M. E. (1992). Cited in Poczwadowski, A., Sherman, C. P., & Henschen, K. P. (1998). A sport psychology delivery heuristic: building on theory and practice. *The Sport Psychologist*, 12, 191 - 207.
- Zimmerman, L. A., & Harris-Thompson, D. (2008). Developing expertise. *ARA Technology Review*, 4, 17 – 22.